An Address
ON THE
RELATIONS OF MEDICAL MEN TO SOCIETY.

Delivered at the Opening of the York Medical Society, Oct. 12th, 1892,

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MR. PRESIDENT AND GENTLEMEN,—One who has passed middle life in a laborious calling may gradually become aware of a certain sense of satiety—a sense of weariness and detachment of interest, so that the work of life becomes tedious, and curiosity and adventure fail or follow after other things. Thus such an one becomes rather oppressed by the limits than inspired by the opportunities of his art, and, losing the faith and the buoyancy of earlier days, he tends to fall into a routine of thought and into a fixity of practice. Dissatisfied with himself for these things and fearing that his faculties are touched by the cold hand of time, he dreams of retirement, either for his own comfort or for conscience' sake. Again, a man of fifty years of age, if he be not a teacher, is losing touch with young men; his friends are old friends, his friends' children, away at school or university, are strangers to him; thus he is deprived of the rekindling which the young give to the elder. The very rashness, the impulsive and untutored fancy, the brave disregard of labour and danger and of the complexities of things, the superb indomitable confidence of young men counteract the rigidity and the worldly wisdom which fasten upon ageing men and tend to sterilise them. Their due fermentations slacken for lack of those microbes. Such was my experience when, owing to a rule which I venture to think an unwise one, I was removed from the active staff of my hospital at the age of forty-seven—an age when vigour is yet full and experience ripe. The relief of the first few weeks of my vacation soon palled; I began to miss the young faces which were wont to gather about me, the heaviness born of long toil settled down upon me, and I began to see in my work the dulness of a trade and the dangers of cupidity. Four years later I took the occasion of a change in the conditions of my calling which altered the sphere and the character of my work, and for nearly three years I enjoyed the holiday of a new vocation and a new studentship. When, after this complete and refreshing change, I was at the beginning of this year called back to the practice of medicine, and to this again in association with a great school, I felt, as it were, born again and endowed with a rare blessing—the blessing of entering upon my profession with the ardour of earlier years, but without their cares and their errors. Is it egotistical in me thus to speak of my own feelings and experience to-day when I find myself, by your generous invitation, here in York again—a centre of so much of my past practice, the home of so many of my friends and fellow workers? I trust not; I rely upon your forbearance and your sympathy. I come back this evening not only with energies renewed, but also with a larger knowledge—a knowledge extended in a department of medicine which is too often hidden away from the common observation, even of practising physicians. Of this experience I may have much to say as occasion serves, and something to say this evening.

Your courteous secretary, when he conveyed to me your welcome and honourable invitation, told me that my audience would not be exclusively medical, and he suggested to me that my address should deal with a subject of general interest to society. I replied, and it was agreed between us, that I could not do better than take this very suggestion for my discourse and consider the relations that exist, and should exist, between medical men and society at large; the place and function which we have in the body of the State. In respect of the existence of the State our function is a subordinate one. Whether in a rudimentary stage or in stages of fuller civilisation, the existence of the State depends upon men of war. These men, so far as we can foresee, must always be the most necessary of our members and will be the most honoured, for in times of danger they must lead, and at all times we see that the art of war is the art of peace. Again, if society, thus preserved, is to have internal stability and cohesion it must be ruled by custom and public and private law; as the soldier makes for external peace, so must we try to regard the lawyer as the minister of internal peace. Until a society be secure without and within it can have no leisure to seek after the higher ends of life, nor to hearken to the voices which awaken the higher passions or lead to the deeper moods of contemplation. Society must then first exist and in the next place learn to what main ends it exists, before the bodily health of its members come into question. Indeed, as the higher purposes of life spread themselves before his imagination, a certain noble indifference to personal ease and longevity becomes the good citizen. We, then, who administer this sort of consolation must be content to take a somewhat lower place in a great nation, unless we can show a title to partake in a task higher than the mere conservation of bodily health, whether of individuals or of communities. We must not forget that the attainment of the most brilliant periods of illustrious nations has been quite compatible with indifference to the sewage question, and that great citizens have preferred glorious life to long life and self-devotion to eupepsia. Even in a state of society so steadfast as our own there is something not heroic in the mere health-hunter, in the man who wanders from doctor to doctor, and from land to land, not that he may do his duty the better, but that he may bear an ache the less. It is our business no doubt to minister to his demands; it is our duty to unfold the last roseleaf which lies awry under his loins, as it is our pains to pick out the last pea which lurks under the downy bed of the princess, for only by her discovery of the pea do we know her to be a real princess; yet there lie in our hearts the names of those, many, many of them our own brethren, who, sturdily thrusting down the knowledge that their weak bodies were playing them false, laboured on to the end.

We will not claim too high a place for our craft lest we be punished for our self-esteem; yet to the physician whose unseen privilege it is to preserve a great leader or a great seer for the service of the State, or, in the life of the family, to restore the loved to the loving, and to bind again the bond which death would have dissolved, there is no light honour, no small blessing; nor is it a small thing, passing beyond personal service, to restore to health the tainted life of a community of men, to purify the wells of life or to arrest the march of a pestilence. But we bear a greater testimony than these. Is there not something more than the cure of disease, something more than purification, something even more than the defeat of a pestilence to which we bear witness? Amid the conflict of religious sects, amid the decay of creeds, even beyond righteousness itself, is there not arising a new idea of humanity—of ethics springing rather from mutual sympathy and tenderness than from moral codes or supernatural sanctions? Are not our eyes opening to see in this humanity, in the revelation of that higher life which is found by losing ourselves in others, the essence of the gospel of Christianity; and if we are true to the best work of our calling, are we not ministers of this new and fruitful hope? To regard the individual conscience is to regard a dark, an unstable, even a whimsical, standard; but to form from day to day higher and higher conceptions of human ideals and of human service is to set forth and to strengthen the ethics of the future, and to this work we also are called. We are concerned more or less directly in the solution of many social problems which may be solved this way or that, but the issues of which are of grave consequence to ourselves and to our children, and will bear good or evil as they come into accord with the higher or the lower impulses and tendencies of modern civilisation. For example, how are we to deal with our insane, our poor, or our criminal members; with diseased, maimed, or idiotic children? Is it reasonable, in order to secure the survival of the fittest, that lunatics should be suppressed, criminals hanged, idiots and cripples gently drowned and hopeless sufferers poisoned? I will not venture to deny that such customs may be essential to the existence of a tribe of Red Indians, and in them may even be compatible with certain lofty virtues, personal or tribal—nay, I will not deny that even infanticide may be practised and approved in certain states of certain societies, but we shall all agree that such customs are to be regarded as of provisional utility. In a rude society the preservation of bare existence must be the dominant claim; we, however, are set free for a more perfect service; what shall our course of action be? Take the case of a murderer arraigned before society for his deed; the soldier or the

lawyer has to regard the matter as one of the immediate safety of society; and under all circumstances the mind of either will be turned simply to the suppression of the malefactor. Carlyle, in one of the Latter Day Pamphlets, seriously proposed to deal with vagrants by flogging in the first instance, and in the next, if the first correction failed, by shooting them. Yet have not members of our profession in courts of law withstood not arguments only, but also derision, when in certain cases they set forth the phenomena of homicidal mania, of epileptic violence, of delusions leading to crime and so forth, and have nevertheless slowly but surely driven the lawyer to restrain his hands, possibly even to modify his opinions? And to what end? Who can say that persons subject to homicidal mania or epileptic fury are not better put to death, both for the safety of society and for their own peace? Fierce and predatory instincts are none the less dangerous for being ingrained; in so far, indeed, as they obey strange and incalculable motives are they not the more dangerous? So when a habitual criminal, a thief or a vagrant, is brought before the magistrate, has not the sociologist to look beyond the immediate duty of the court and to consider whether the aberrancy be not even an untimely virtue?—"l'humanité a commencé tout entière par le crime";—or, if otherwise, whether the fault be in the action, positive or negative, of the older and more fixed organs of brain or body which no ordinary outer motive can change; or, again, whether it be due to the action of those more recent and loosely organised parts of the nervous system for the state of which we are called responsible, and which, at any rate, are constantly under modification by outer motives—such, for instance, as rewards and punishments? Nor is the question of responsibility exhausted even by these considerations; for if crime or wickedness be not the result of fixed forms of growth in the individual, but rather of modifiable parts, we have still to ask whether the causes of the discord be not due to conditions of external life for which society, rather than the individual, is responsible. For in reason society may not punish evil doers of its own making.

Again, who, taking his seat, as I have often done, in the wards of an idiot asylum, and, watching the antics of these pitiful, grotesque and degraded creatures, has failed to ask himself to what end they are cherished or even kept alive? Would it not be better that many of them, at any rate, should be consigned to a lethal chamber? Perhaps more hardly still presses upon us the question of suicide. There is no doubt some unreality about the complaints of many sufferers from melancholia, an unreality often hard to measure; but there is as little doubt that the horror of life is grim and abiding enough in many of them. A thoughtful woman lately denounced to me somewhat bitterly the cruelty in a system which has condemned a near relative of her own to confinement for twenty years or more, merely because he desires to end a life which is a hideous torture to him, and thus compels him to bear the burden of it. And who is to say that the reply to her and to him is an easy one? Once more. Beside the bed of one suffering from incurable pain—from aneurysm be it or cancer—who has not asked himself to what purpose that woful life is tenaciously spun out by every art that physician and nurse can devise, despite perhaps the longings of the sufferer himself to be at rest?

These are some of the more grievous kinds of stress which try us, but I need scarcely point out that within these outer limits are a large number of cases which lie open to similar arguments and to similar doubts, and which involve practical difficulties which we are called upon to consider and even to resolve either on grounds of private expediency or of public policy. For instance, should persons who inherit disease of mind or body, or even a disposition to such disease, be permitted to marry? To what degree should children be subject to their parents, and what in them are the respective claims of discipline and education on the one hand and of gaiety and freedom on the other? What are the evils, to body, mind or affections, of gathering stray children together in institutions, and how are these evils to be avoided? Is the gain of any social fashion, system, party or creed which tends to steady us and to keep us together, greater than the harm done by it in the loss of individual liberty and sincerity? Such questions are almost endless, and, as churchmen lose hold or lose courage in these matters, they come more and more into our hands: thus we become more and more concerned not only with the growth of the lower body—of the bones and the blood with their affections and lusts; but also with the growth of the higher body—of the organs of the mind and of the imagination. Common sense, good guide as it is in common affairs, takes no account of new ideas. The robust sagacity of statesmen and lawyers, which is bred of incessant converse with practical life, is perhaps the best instrument we can have for the ordinary courses of law and politics. But this mental habit—the mind of the clubs as we may call it—is too blunt and rigid to handle new ideas or even to perceive them. Men who find their scheme of life workable have no desire to transcend it. The man of the world, as I have said, may think of the epileptic homicide that, explain him as you may, so wild a beast is better put to death, both for our sakes and his own. Indeed, what gain can it be to him to be spared for lifelong detention in Broadmoor? Thus again, of criminals of fixed type, the sensible man thinks that were flogging more freely dealt out to brutal offenders we should have fewer brutal crimes, and that no such punishment can brutalise men who are brutes already. Here, however, we touch the region of new ideas, and here common sense is at a loss. For the question arises, not whether the homicide be the worse, or the criminal brutalised, but whether any such kind of treatment brutalises those who contemplate it, or arrests in them the growing sense of the sanctity of life; the question is not so much of its direct relation to the individual as of its recoil upon society. So long as the public find no offence in this kind of justice so long it may be excellent justice; but so soon as the public comes to perceive that it is rough justice it will tend to violate the higher sentiments, and grow mischievous less to the sufferer than to those consenting to his fate. In this view the individual is not forgotten, or his deserts, but, as has been well said, Ugolino awakens in the reader far more of pity for his cruel death than of loathing for the crimes which that death was insufficient to expiate. Not that the individual is more than the civic life—quite the contrary; it is that a broadening and deepening of the fund of pity is a condition of the higher forms of civic life. Common-sense used to declare that men whose hands are strong, but whose heads are thick, may well be the slaves of men of finer clay; yet the old world and the new have been rent by this high argument, and the issue has been decided against common sense, or against that which then was common sense. Henceforth all nations proclaim not only that life, as life, must be cherished, but that the opportunities of life shall be safeguarded also. Freedom shall mean not only the abolition of formal slavery, but also the removal of all hindrance to physical and moral development. This faith, this tender reverence for life and its opportunities, men of our profession have unselfishly and persistently preached and proved, hoping in due time, perhaps, to reach the moral elevation of the Bishop of Manchester.

Our appeal to those in authority, then, shall always be this: Will this dispensation tend to increase or to diminish the fund of pity? Men of the day, loyal public servants, men of uprightness and of clear and narrow vision, are hardly moved by new ideas; but new ideas, like mushrooms springing underground, are irresistible, and are apt to become destructive if resistance be continued. The duty of society towards suicides is more difficult to define. "Their temporal offence," in Blackstone's words, "is committed against the king, who hath an interest in the preservation of his subjects"; or, in the language I have used to-day, they cheapen life which it is our duty to consecrate to civic service only. Life shall not be expended for personal ends; or even for mere personal honour, which is apt to be fantastic; or for personal relief, which is desperation. Despair, however, may hold a man as a disease, and in this case shall we connive at suicide? In this matter connivence or even supineness is consent. On the other hand, if we are to dog every man who at any recent time has been heard to call for death, we shall do much wrong, and some wrong of this kind is done. The sacredness of life will not, I think, be diminished if on such a death we can show that precautions of reasonable amplitude had been taken. It is not for us, or for superintendents of asylums, to make suicide impossible at the cost of all who are dejected in spirit. We shall not thus increase the general fund of pity.

In the matter of "euthanasia" our course is clearer: the cases in which a sufferer, not sick of mind, calls instantly and persistently for relief by death are fewer than we are wont to suppose; whereas the cases in which that relief of his would bring solace to the bystanders are many. As Jeremy Taylor says, "A healthless body and a sad disease do seldom make a man weary of this world, but still he would fain find an excuse to live." Herein the broad rule

shall hold, that life shall be laid down only in civic service, and he shall bequeath to his children the noble example of his patience. That which I have spoken concerning the sanctity of life itself I have said also concerning its freedom. By freedom, however, I mean not mere licence, but opportunity: the man who is merely cast loose is not the most free, but he whose higher aims and special faculties have the most space and encouragement. There is a natural tendency in us—the original sin of our craft—to take too carnal a view of the body. At what cost, we cry, are these weakly children nurtured; to what end are these channels of disease—scrofula be it, cancer or neurosis—kept open? Shall we not favour the survival of the fittest?—who, then, are these weaklings to whom we give footing in our room? Now the survival of the fittest may or may not be the survival of the highest. The fittest of a backward or retrogressive society would not be the best of our own. We cannot tell which shall be the fittest till the form of the coming time is revealed. A society at one time may need bone and muscle, at another may dispense with some of its prize-fighters and need the qualities of the inner life. It is now far more to our people that the fund of pity should increase than that all weaklings should be eliminated. Tenderness, gratitude, love are more to us than two legs, two arms or two lungs; moreover, the higher gifts of the imagination may be found in the frailest or the humblest vessels. What would have been our loss had the parents of Keats or of the Lambs been forbidden to marry by the common order of medical men to forbid the unions which may produce such children? Nay, even Mr. Dick had a kind of wisdom which many reasonable men fail to attain. The highest works of man are no doubt the sanest; the most perfect is the most serene; in the strongest is strength most concealed; yet how much the poorer would the world have been without the noble melancholy, the lyrical vision, the weird romance, the Elian humour and sympathy, the passion or the fiery enthusiasm of many of those whose names the world will not willingly let die, but whose minds were darkened by the shadow of insanity. What are we, then, to do? Are we to drift and to let the weak and unstable increase as they may? Not so. In the first place, we must so watchfully govern the conditions of life that the weak shall be made strong and the crooked straight; and in the second place, as we advise under the special circumstances of each case, we shall modestly remember that there is more in philosophy than our doctrine, more in mutual affinities and spiritual impulses than we can analyse or direct. This is in the manner of the higher part which I have claimed for our profession in the time coming and now at hand.

In claiming for our profession a part higher than to minister to the grosser functions I have been bold, but my note is no bolder than that tonic of our brotherhood—the oath "which in its grandeur and simplicity, and in the deeply religious sentiment which dominates it, impresses something solemn and sacred, even sacerdotal," upon the practice of our art.[1] If we are to hold these heights we must make ourselves free of the best ideas of the age in which we live. Physical science, essential as it is, cannot alone give us that tincture of humanity—that breadth of sympathy, that knowledge of affairs—which is to be gained by conversation with philosophy and history, with ethics and politics: that is to say, with the thoughts, the hopes and the ends of mankind. We are not too much apart from the common polemics of the hour; indeed, I think doctors and clergymen are alike too ready to swim in these breakers. This notwithstanding, we are under temptation to carry all questions into our own province rather than to carry forth our own special knowledge to mingle with the broad current of the larger world. Hence we are too often provincial in our notions and in our ways of handling things, as all bodies of men become when shut up within their own gates. Our danger is greater as our studies by their special intricacy are more isolating and extend themselves by vast, continual multiplication. Moreover, our practice does not bring us widely into touch with the public; it is mainly domestic, personal, recluse, and tends to catch rather the tone of the laboratory or the boudoir than of the world. The barrister, who in his practice is in daily contact with public affairs, has thus a great advantage over us in these things, and he passes readily from the Bar to the Cabinet. With a smaller academic education his view of life nevertheless widens, he gains more sagacity in the councils of the State and is more in touch with the ideas of the day. He is shoppy enough, no doubt, really more shoppy by far than we are, but luckily for him his shop is of common interest; ours is technical, dry and often repellent. Thus it is that we find ourselves, and complain that we find ourselves, outside the sphere of government, ineffective in national debates and without that degree of consideration which we regard as our due. May there be grounds, indeed, for further warning, lest a devotion too exclusive to the schools of physical science—large and sinewy as the study is—should in the long run withdraw us too much from other studies more directly humane, from our attachment to traditional standards of ethics and politics, and from conversation in the sphere of idealised passion which we call things spiritual? Is not Nature, when at her best, ever weaving fresh brain webs, ever vibrating to finer and more complex external harmonies, which, as they continually become condensed, organised and rationalised, are nevertheless, as they grow on, as continually transcending reason? Do we not feel that some quality is lacking in the perfectly regulated and indifferent man, or in the man to whom age and failing fires have granted too much wisdom—that quality which the artist first reveals and which the man of science essays afterwards to interpret? Putting aside personal culture, have we not, in our relations to society, to minister not only to bodily ills in the grosser sense, but therein also to the defections of that exquisite sublimate of the body—the mind and imagination? If, therefore, our precious stores of knowledge and practical skill are to flow more freely and be seen more abundantly among men, we must enlarge ourselves by a broader culture than that of the medical schools. To our universities—present and to come—we commit this trust.

Another cause of our isolation lies in the exclusively technical course of our education, from which the "humanities" are more and more excluded. Thus we are removed from discussion with laymen and begin to regard our knowledge as too peculiar for common use. From this centre we have been rudely shaken of late years by the discipline of the witness box, where no oracular utterances are tolerated. The lawyer has taught the doctor at least one wholesome lesson—namely, that whoso cannot clearly explain his own propositions to an intelligent hearer does not thoroughly understand the matter himself. Our patients also have discovered this, and pretend that no gravity of countenance and no airs of profundity will satisfy those who come to us, not for discipline, but for information and advice. The information they will carry away if they comprehend it; the advice they will listen to if it be reasonable. We sometimes forget, however, that judgment and decision remain not with us, but with them. Our great but silent profession will find in time a larger voice and the honour of men. Nevertheless I do not burn for this fruition. Earnestly as I desire to see our culture broader and more humane, it is not for the gain of temporal power or splendour, but for the fuller interpretation of the higher life of our citizens. More than once I have publicly said, and I now repeat, that titles and the honours of the market place are rather for others; our calling, as Dr. Daremberg says, "has something religious, something solemn and sacred," which ill accords with controversy and domination.

Within the compass of our thoughts this evening there lies a subject which during the last few weeks has been so publicly discussed that to keep silent upon it might seem in me like deliberate evasion. The public discussion of physiological experiment upon animals was, however, so heated that the moment seems unfavourable for a calm judgment on the matter. No compassionate person can fail to have considered well whether, as things are, experiments upon living animals be cruel or tend to diminish what I have called the general fund of pity. We can none of us regret that the question has been raised—a compassionate people is bound to look closely at such problems; nor can we regret that the practice is fenced by such reasonable checks as may prevent abuse. Whether the present checks are reasonable and sufficiently elastic is not a matter of principle, and may now be passed over. We are born into a world which, in its travail, wades through pain, torture and death as it rises in distressful victory from plane to plane of life. It is impossible by any mediation of man to alter this scheme—these essential conditions,—but it is the duty of man to mitigate and to economise the effects of this dispensation and to inquire of himself continually whether by all means he is diminishing the sum of hurt and distress in living things. This test must be final, and no other ultimate

[1] Vide Daremberg: Œuvres Choisies d'Hippocrate, pp. 2 and 3. Paris, 1855.

test of our means can be admitted or even conceived. Ends, certain saws notwithstanding, are the only tests of the means. Abraham and Agamemnon tried alike, acted alike, and if in matter of fact erroneously, yet in matter of ethics rightly. To extend or maintain our own particular dominion almost daily we send out, not animals only, but men also, and these in droves, to mutilation and death, staying mostly at home ourselves; and we are right. Your soldiers are said to like it—so do cocks; the question is of the greatness of the end. A Right Reverend Bishop tells us that the quantities of animals which he has slaughtered and devoured are sacrificed for the quality of his voice, and who is to say that the end does not justify the means? Not we who enslave or slay many more for profit, recreation or caprice, and win honour for it. The reduction of the sum of suffering in living creatures is, however, a far higher end than any of these; and we have to inquire whether experiment upon living animals is a means to this end, and if so, whether it be applicable. The answer is that it is applicable, and is applied daily and hourly almost everywhere. All practice of medicine and surgery, whether upon men or animals, is to experiment on them. In the older and simpler ways of practice we have experimented long and often, and made pretty sure; but these carry us over little ground, and an infinite gradation of certainty lies between the administration of such a familiar, but by no means guileless, drug as iodide of potassium, and such an intrepid and magnanimous experiment as that of Dr. Hankin, who, after prolonged testing of antidotes by himself and others upon animals, swallowed the virus of cholera intensified twentyfold, thus showing his faith in the relative value of results gained upon lower animals, and his ardent and generous search after an antidote to this devastating pestilence. I have taken two extremes, and I repeat that in and between these extremes all practice of medicine—even the very withholding of an ordinary drug—is experiment, and often very dark experiment, upon living beings, mankind or other kind, and that all change of remedial means and procedures consists in experiments ever renewed. Experiments upon living beings, for the good of living beings high or low, must therefore have been continual, and they must still continue if medicine is to advance beyond incantation and the horn of the unicorn. But, it is keenly urged, experiments upon animals in the laboratory are and have hitherto been sterile. This appears to me to be a vain, if not a stupid, argument. Such may or may not be the case. Our discussion is not of the present value of results, which may be useless to-day and precious to-morrow, but of a method which may have periods of hidden germination and periods of fruitfulness. In so highly technical a discussion few persons can take a useful part. Physiologists, however, do not work in mere frowardness, or only to attain that habit of accuracy which leads to truth; it is admitted that invaluable results have been reached by scientific investigations in other fields which at first sight seemed idle, which for long seasons were profitless, and which were carried out in a spirit of disinterested love of truth; and physiology is a science of like nature to other positive sciences. "Nothing, madam," Sir William Gull once said on this subject—"nothing is so mischievous as ignorance." The vanity of the argument, however, lies in this that it misses the whole point of principle. The question of principle must be thus formulated: granting that experiment upon living animals has led or may hereafter lead to gains infinitely valuable in respect of the cure or prevention of disease, am I in pity bound to forbid these experiments under all circumstances? I may lay down my own life, but am I to fortify my heart and watch my fellow creatures die of cancers, consumptions, malignant fevers and the like, and deny them admitted methods of help? In such case do I not consent to their fate, and, if so, can I justify so awful an abstention? This is the question of principle; it is applicable to the sufferings and death of all animals, greater and meaner; beside this question the accidents of more or less temporary success in discovery are subordinate, and may be considered by themselves in a competent court. But how is the question of principle to be answered? We answer it in one way; is there any competent and serious person who can deliberately answer it in the other?

Many more subjects akin to those which I have touched arise in my memory, and have doubtless arisen in yours, which might well have been discussed before you in this address. Already, however, I have bestowed too much of my tediousness upon you; the hour and your patience bid me conclude. Permit me to hope, encouraged as I am by your kind attention, that the reflections which I have made to-night upon a few subjects may prove sound enough and broad enough to be applied likewise to others. Many of my hearers may have held before me the opinions I have uttered, to a few more I may perchance have carried conviction, and I am grateful to err in such company. Those who differ from me may, I trust, have found some materials for fresh thought and no matter of offence in the words I have ventured to speak on the opening of this session of the York Medical Society. To that Society I offer a present adieu and an abiding store of goodwill.

THE ETHICS OF OPIUM AND ALCOHOL.

THE ANTI-OPIUM CIRCULAR TO THE MEDICAL PROFESSION OF GREAT BRITAIN AND IRELAND.

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(Concluded from page 1092.)

I HAVE purposely in the preceding remarks excluded all reference to China for the reasons mentioned in my introductory observations, and because, in whatever light the commercial relations of India with China may be regarded, they have nothing to do directly with the treatment of its own subjects by the Government of India. It would still have to supply them with opium should the China trade be closed to them, of which the advent is not yet, although some intelligent Chinamen believe it to be approaching, from the action of the Chinese themselves. There is still one point connected with the Circular with which I have been dealing that I have not noticed—viz., that the free sale of opium in India tends to *innumerable acts of suicide*. The opium agent to whom I have more than once referred informed me that he never in any part of the country in which he has served heard of a single case of such self-sacrifice, and disbelieves in their existence. In my official tours of inspection, in which I visited every part of the Lower Provinces more than once, and had exceptional opportunities of acquiring information on matters connected with crime, I never heard of a single case. In Calcutta, with its population at the time I resided in it of more than half a million, I do not remember an inquest upon a case of the suicide of an opium-eater, and as most of these inquests were then held within the precincts of the Medical College, I should certainly have known of them, for when I was appointed Professor of Medical Jurisprudence I was kept informed by my friend the coroner, the late Mr. Piddington, of all crimes which came under his purview, for the illustration of that portion of my medico-legal lectures.

The latest information I have on the subject is in a recent work on Medical Jurisprudence in India, in which the number of fatal cases of poisoning by opium in five consecutive years—1885 to 1889 inclusive—is contained. They were—

In the Presidency of Madras	...	...	25 cases.
,, ,, Bombay	...	...	81 ,,
,, ,, Bengal	...	...	266 ,,

The Bengal cases apply to a population of nearly seventy-five millions of people, including 978,000 in Calcutta. If they were all suicides among opium consumers, which is most unlikely, such a drop in the ocean of humanity cannot be accepted as representing the "innumerable acts of suicides from opium" alleged in the Anti-opium Circular. A more convincing proof of the "falsehood of extremes" it would be difficult to find anywhere.

The present Professor of Medical Jurisprudence in Calcutta, who is also police surgeon, in a publication of his medico-legal experience in that city between the years 1888 and 1890, mentions only one case of supposed poisoning by opium, and that a case of murder.

In the well-known work of Taylor on Poisons it is stated that in five years, 1863–7, there were 2097 deaths from poisoning in England and Wales, in 1270 of which the poisons causing death were ascertained; of these, 597 were from opium and its compounds. Such figures have never been attained among the millions of India, so far as I know. That many undiscovered cases may occur in that country is most probable; for even at home, in three-fifths of the deaths which

are ascertained to have been due to poisoning, the exact nature of the toxic agent is not discovered. But, as all the above statements can be verified, they dispose effectually of the myth of the innumerable suicidal deaths from opium in India.

Before considering the formulary of the Circular I must refer to the statement of Sir Charles Aitchison that "the question is not one of better or worse morality, but of the salvation of a whole people from a vice which we have introduced among them, and from a ruin which it is to a great extent in our power to retard, if not to prevent." With every respect for the opinion on State affairs of so distinguished a man as Sir Charles Aitchison, I am unable to accept either his premiss or his conclusions. A reference to the record of the mission of Mr. John Crawford to Burmah shows that a mission from China, which he met, after a conference smoked long pipes, which doubtless were opium pipes, as I am not aware that the Chinese smoked tobacco at that time, or at any time, in long pipes. The evidence of Mr. John Laird, a merchant who was imprisoned by the Burmese, stated that a considerable portion of the capital was occupied by a Chinese colony, some 3200 in number, and that among the articles imported by sea into Burmah was a "little opium." There was then and long before that time (1795) considerable intercourse between Burmah and China, and where Chinamen were, there was opium to be found. Sir Henry Yule, in his magnificent record of the mission to Ava in 1855, speaking of the import trade from China to Burmah, mentions spirits from rice for the consumption of the Chinese residents, tea, velvet, felt rugs, walnuts, chestnuts and *opium*, so he was assured. He adds, in a footnote, "Burney also mentions opium. It was sold in his time at one-fourth the price of Bengal opium, and was of very inferior quality. It was grown clandestinely at Talafee." How, then, we could have introduced a vice for the indulgence in which the material existed in the country long before we incurred any responsibility in the matter, and which was not a national habit of our own, I fail to understand. Surely it is far more reasonable to suppose that the credit or discredit is due to the Chinese, who do practise the habit, and carry it with them wherever they go. The use of opium in moderation is, I maintain, eminently and primarily a strictly moral and economic question, altogether irrespective of the collateral conditions attached to it. Whether the Burmese are more susceptible to the evil influences of smoking or eating opium than the Chinese or other nations, I know not. There are great differences in individuals in all such matters, and there may be exceptional differences in nations. I hope, therefore, that some light will be thrown upon this point by the inquiry which has recently been held in Burmah. But I am quite unable to accept the view of Sir Charles Aitchison on the matter. I have been a student of history all my life, and I have never read of any nation that has been ruined by its smaller curable vices. It happens that in the case of Aracan, inhabited by a race of strictly Burmese origin, which came into our possession at the same time as Assam, we have a living test of the question, which may be studied with advantage. I am informed by the officer most competent to express an authoritative opinion on the question, inasmuch as that province was under his able rule for some years, that the operation of the Bengal Abkaree regulations was extended to it immediately after its cession by the treaty of Yandabu. The result was, he said, decidedly beneficial, morally and physically, as I myself witnessed when I visited that province officially many years afterwards. It is singular that the smuggling of opium into Aracan from Upper Burmah also, long before its recent annexation, was extensively carried on. Most ingenious stratagems were resorted to for its concealment, and the opium smuggler was a well-known character. Where was this opium manufactured? It could not have been in India, where it was much too expensive to bear such transplantation. In 1851, on my return from Mauritius in a vessel carrying homeward-bound coolies, I fell in with a leading Chinese merchant of Calcutta, an old friend of mine. I asked him what took him to the island in the Indian Ocean, and he said to smuggle opium, of which he had succeeded in landing a fair venture. He told me confidentially how he had deceived the Customs authorities, and it exhibited considerable audacity and skill. He evidently considered us to be fools in the war of wits, and I do not think he was far wrong.

Conclusions.—Prior to examining the four specific questions submitted for the opinion of the medical profession at home, without in any way questioning the *bona fides* of the numerous signatories, I think I am justified in doubting and denying the value of their assent, as I believe that the matter has not been fairly put before them. It is the work of a self-appointed tribunal whose means of personal acquaintance with most of the conditions alleged by them to exist were necessarily limited, and who have not supported their chief contentions by a single proof, as I do not hold bold asseverations to be entitled to be regarded as matters of fact, in the absence of even the shadow of evidence that is required to substantiate them. I do not regard the implicit adoption of the views of the Circular by sponsors from China as entitled to be considered at all in relation to questions of fact respecting a country and a people with which and with whom they are presumably personally unacquainted.

The *first proposition* is that "the habit of opium smoking and of opium eating are morally and physically debasing." This academic proposition is true only of the habits if carried to excess, and is indefensibly untrue of the moderate use of the drug, as the evidence which I have adduced appears to me to establish beyond the reach of doubt or denial by any reasonable or reasoning person. The opium broken-down drunkard is nearly unknown in India, so rare is his appearance. The moderate consumer is known to exist in thousands, possibly in much larger numbers, and amongst these are some of the finest races in India, mentally, morally and physically, as I know of my own personal knowledge, and as is more widely and generally known by the recorded evidence of thoroughly trustworthy authorities. It is idle to consider questions of such great importance in their scientific, social and political relations if the proofs of the facts necessary to enable a correct judgment of them to be formed are not given. Montaigne in his "Essay on Moderation" begins by saying that "if our touch is infected, we corrupt by our treatment things which are in themselves good and beautiful." So long as human nature is what it is, and the laws which regulate human actions are what they are, false, because misplaced, philanthropy, which is too often mere hypocrisy, causes damage, and destroys what it would be wiser to preserve and utilise under such restraints as can prevent their abuse. In the Circular it is paraded on Government authority that there are in British India 10,417 shops licensed for the sale of opium, and the incorrect inference is drawn that the Government by its excise regulations is forcing it upon the people by restrictions on the smallness instead of the largeness of its sale. It must be remembered that the above number of licences are for the supply of 287,223,431, or nearly 288,000,000 of people of many nationalities. Are the writers of the statement aware that the number of licences for the sale of intoxicating liquors at home in 1891 was as follows?—

Annual licences, England and Wales ...	184,743
,, ,, Scotland	18,460
Licences to dealers or retailers of excisable liquors in Ireland	24,394

Do they venture to charge the British Government with any deliberate intention of degrading and debasing our population by forcing on them the enormous amount of agents far more destructive than opium, which are shown to be consumed at home? Instead of being astonished at the extravagance I am surprised at the moderation of the rulers of India in this matter. Of opium itself I could adduce an abundance of additional evidence of its comparative innocence as an intoxicant when compared with alcohol. The celebrated physician Sydenham regarded it as the greatest boon conferred by Providence upon humanity among agencies of relief, from the extent and variety of conditions in which it was useful and in which no other drug could replace it. The views of one of the most distinguished surgeons we have ever possessed—Sir Benjamin Brodie—I have already given. It would be easy to add to this list were it necessary.

The *second proposition* is that "the unrestricted sale of opium is immediately associated with many and grave dangers to the well-being of the people of India." My answer is that the sale of opium is, and has been for the last seventy years or more, very carefully restricted by the Abkaree regulations, and during this long period no public danger of any kind, grave or otherwise, has resulted that I either know or have heard of. This is another of those statements of which no proof has been afforded, for the population continues to increase with rapid strides, the prosperity of the country has increased in proportion, there is no general falling off in the morale and physique of the inhabitants of any part of India that I am personally acquainted with, and I have not found a single officer of experience acquired in other parts of our magnificent

empire who has seen anything of such a decline and fall. Even the opium dens of Calcutta, from a recent personal examination, appear to be models of propriety worthy of imitation by the gin palaces of this country, for I suppose no one has ever found one of these latter "as quiet and orderly as a prayer-meeting," such as Surgeon-Lieutenant-Colonel Crombie saw in Teretta bazaar, and which was also witnessed at the same time by a deputy-commissioner of police and by a European inspector. I passed that bazaar almost daily for thirteen years at all hours, and never saw an opium spectre emerge from it. I must therefore, until better informed, class this portentous prognosis of present and future perils among the fictions which abound in this Circular.

The *third proposition* is that "the drug opium ought in India, as it is in England, to be classed as a poison and be procurable from chemists only." Unfortunately for this recommendation opium in moderation is not a poison, and in its fiscal relations has much less business to be classed as a noxious agent than alcohol. It is treated, and rightly treated as respects its general use, in the same manner as alcoholic stimulants, by excise regulations and licences, which are far more stringent in India than at home. The proposition, then, is on all fours with a law, should any administration be idiotic enough to entertain or to pass it, that would require every glass of gin and whisky now obtained in a public-house, club, hotel or other licensed or unlicensed place at home, to be prescribed by a competent medical authority and purchasable only at a chemist's. But, still more unfortunately for this astounding want of acquaintance with the social condition of India, there is no class of chemists in existence in that country. I have visited every part of Lower Bengal, Assam and Aracan, and never heard of them among a population of some seventy millions of souls. When I was chemical examiner to the Government the wallet of every suspected professional poisoner arrested was sent to me for examination; and whilst I found in them datura, aconite and other vegetable poisons, as well as preparations of arsenic and corrosive sublimate, I never discovered a grain of opium that I can remember, as it is neither used as nor considered to be a poison by this class of natives. Has classing it as a poison in England and subjecting it to stringent conditions prevented its widespread use in the fen districts? Of it Dr. Ringer of University College says: "In this country the habit of opium eating is not so largely indulged in as among Asiatics, but it is practised here in some localities to a startling extent." In one of the classic reports of Sir John Simon is contained as serious an indictment against the abuse of opium in England as could ever have been written of its use and abuse in India. What chance, then, would dealing with it in the manner gravely proposed in this third count of the indictment, and applicable to millions of many nationalities widely differing from each other, have of success, were it even as practicable as it is impossible?

The *fourth proposition* is a corollary of its immediate predecessor, and is to the effect that "the Government of India should prohibit the growth of the poppy and sale of opium, except as required for medical purposes." This visionary suggestion might possibly be carried into effect in British India, but, were it so, would in that case at once stimulate an openly increased production in the native States not under our immediate control, and a surreptitious augmentation in our own territories. No agency that the Government could employ, at fabulous cost, could prevent such opium finding its way to those who were resolved to have it. Who would be able to determine its medical purposes, and what authority could exercise any control over its sale in that sense, by the (non-existent) chemists, who would have themselves to be created? Leaving China and the Chinese in their own country out of the discussion, which relates only to India, what example have we of any civilised people among whom the opium habit exists largely, as to the effects of its practically unrestricted use, on the moral and physical condition of the people? In 1880 the opium smokers in the United States of America were estimated at nearly a million, and they are probably more numerous now, as the habit was then said to be increasing. Has any general moral or physical degeneration among this great body been observed and recorded, such as to constitute a national calamity or disgrace? I have no means at the present moment of ascertaining the views of the medical profession in the great republic on the subject, but I observed no such effects when I visited America in 1881, and I heard nothing of it from any of the American professional men with whom I came in contact. Of the Chinese out of China, I have come into contact with two communities—one in Calcutta, small; the other in Singapore, very large; and among neither of them did I hear of, or see, any examples of those presented in such dark colours by the anti-opium agitators. With those in Calcutta I had, as already said, an intimate acquaintance, and there was not one that I saw or heard of to whom the reproach of being an opium drunkard could be attached. They were a healthy, vigorous, quickwitted and excellent body of men, with no indication of moral or physical degeneracy. I visited Singapore nearly thirty years ago, when the Chinese colony was computed at 40,000, of whom 15,000 were known to be opium consumers. Both numbers, I have been recently told by an officer who dwelt long among them, have increased considerably since. With my friend, the late Sir Orfeur Cavenagh, at that time Governor of the Straits Settlements, I visited the Chinese quarter, and from him I obtained much information regarding them, and saw and heard nothing to indicate anything in the least approaching to general moral, mental or physical degradation. Similar testimony respecting this community was given by Sir Frederic Halliday before the Committee of the House of Commons already referred to. According to the census just taken, Rangoon, with a population of 180,000, has a Chinese contingent of 8029, of whom 6155 are males. A gentleman who occupied for some time a leading position in the business portion of that community told me, within the last week, that he never met with a more intelligent, healthy and capable body of men than the Chinamen with whom he came in contact. Those who emigrate must then be either selected specimens of their race, or exercise more control over their actions and appetites than those they leave behind them. It is, I think, to be regretted that the anti-opiumists who paint the Chinaman in such dark colours in his own home have not, so far as I know, collected and published detailed statistics of the numbers, ages, occupations and proportion to the rest of the communities of which they form parts, of the victims of the opium habit carried to excess, should such figures be procurable. If collected with the rigorous exactness required in all statistical inquiries, these figures would carry more conviction than any unsupported statements can or ever will do.

And now, having considered the assertions and propositions contained in the Anti-opium Circular, I am in a position to ask whether those who are clamouring for the suppression of the general use of opium in India, have considered the alternatives which would inevitably follow the complete disappearance of that drug as a general stimulant? These would, in my opinion, be gunjah (already largely in use) and alcohol, because these are and must remain the cheapest substitutes, and those most within the reach of the labouring classes. The former is too well known as a prolific source of crime and insanity, and the action and effects of the latter would be very much the same as they are in Europe, as I know from having had a few alcoholic native drunkards in my wards, when I was a hospital physician. Where would be the advantage of substituting more mischievous for less harmful stimulants under any plea whatever, for opium has not yet been shown in India to occupy the post of preëminence in moral and physical deterioration, that alcohol certainly fills amongst ourselves? I can only apply to the craze on the subject the dictum of Horace:—

> "Insani sapiens nomen ferat, æquus iniqui
> Ultra quam satis est virtutem si petat ipsam."

What is really wanted for the settlement of the question—if it ever can be settled—is a more exact collection of well-considered and supported facts, and less exaggeration in their interpretation. Regarding these conditions what said the bard whose loss we are all now deploring?—

> "Her open eyes desire the truth;
> The wisdom of a thousand years
> Is in them. May perpetual truth
> Keep dry their light from our tears,
> That her fair form may stand and shine,
> Make bright our days and light our dreams,
> Turning to scorn with lips divine
> The falsehood of extremes."

Athenæum Club.

PRESENTATION.—Dr. Guillemard, lately ordered to South Africa on account of his health, has been presented with a testimonial consisting of a purse of £175, and a parchment scroll upon which is engrossed an inscription testifying to the sincere regret of his friends and patients on the occasion of his leaving Southsea.

INTUSSUSCEPTION AND ITS TREATMENT BY OPERATION: ILLUSTRATED BY TWO CASES.[1]

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THE treatment of this somewhat rare affection has always exercised the minds of practitioners, but of late years, owing to the enormous strides made in aseptic surgery, abdominal section has become a recognised form of treatment, and hence intussusception is now looked upon by advanced men as a purely surgical condition, quite as much so as strangulated hernia. The results of abdominal section so far have not been brilliant, owing chiefly to the delay with which the operation is undertaken; the conditions resulting from the prolonged invagination being such as to necessitate so formidable a procedure as resection of the bowel, an operation attended with much mortality, even when performed in non-gangrenous cases. Mr. Arthur Barker in 1888 collected 73 cases of intussusception which had been treated by abdominal section; 13 only of these cases recovered; in 34 the bowel was simply released and no further operative measures undertaken, yet only 12 recovered. In 133 cases recorded by Mr. F. Treves there was a mortality of 72 per cent.; when reduction was easy, in 30 per cent., and when difficult, in 91 per cent. The reasons for this great mortality are (1) the tender age of the patient and (2) the late performance of the operation. Operations on infants, in whom the affection is most commonly seen, are rarely successful, the patient usually dying of shock caused by the necessarily prolonged manipulation of the bowel which is needed to reduce the invagination. Now, what should first be done when we are confronted with a case of intussusception? Should other means than operation be first employed? Certainly, it would be well first to arrest the peristaltic action of the bowels by the administration of opium or even to give emetics. We should then try to force back the invaginated bowel (which can nearly always be felt through the anus) by means of air, hydrogen gas, or water injected per rectum, whilst the patient is under the influence of an anæsthetic. Probably air or gas is safer than water, being lighter and less liable to cause injury to the bowel. This method has been fairly successful, especially in children under one year. Should it fail, then immediate resort should be had to abdominal section. This should be in the median line, and when the tumour is come down upon, by careful manipulation we should try to pull out the invaginated bowel, not using too much force. Even if there be no adhesions great difficulty is often experienced in reducing the intussusception, owing chiefly to the resistance offered by the ileo-cæcal valve and the cæcum. This is seen in one of the cases narrated below. When the invagination has been reduced the bowel should be carefully examined for gangrenous spots and rents. The gangrenous areas should be excised and the rents sewed up. If we find the bowel gangrenous throughout, resection is our only resource. Resection is rarely successful owing to its tediousness and the shock caused by the operation on an already enfeebled individual. Senn advises lateral anastomosis in cases where the bowel is not gangrenous but cannot be reduced, or where the continuity of the bowel cannot be restored by circular suturing because of the difference in size of the two ends of the resected bowel, or owing to inflammatory softening. The plan adopted by myself in Case 2 seems to me to be preferable to lateral anastomosis in cases of irreducible and non-gangrenous intestine. Should the bowel, however, prove gangrenous Barker's operation may be proceeded with through the same incision. Some recommend that an artificial anus be established. The results of this procedure have been, however, almost uniformly unsuccessful. Mr. Arthur Barker[2] recommends an ingenious procedure, the feasibility of which is very attractive, and I have been waiting ever since reading his paper for a suitable case in which to put this method into practice. It is briefly as follows: "At the point at which the intussuscipiens receives the intussusceptum the two portions of the bowel are at once united by continuous circular sutures of fine silk, taking up the serous and muscular coats of each and carrying the sutures on to the mesentery. A longitudinal incision is then made for about two inches through all the coats of the intussuscipiens in its free margin. This gives access to the sausage-like intussusceptum. The latter is then drawn through this incision and cut across at its upper end, or if too long to be drawn out is first cut across *in situ*. A few stout ligatures are, however, passed through all the walls of the stump as the mass is gradually cut off, and are tied tightly so as to keep the serous surfaces in contact and control all bleeding vessels. The stump is now cleansed, dried and dusted over with iodoform and allowed to drop back through the incision into the intussuscipiens, and the longitudinal incision in the latter is closed by a continuous suture from end to end." Mr. Barker has operated in two cases, but both ended fatally, owing to the fact that the operation was undertaken too late. It appears to me that this operation has much to recommend it, being more rapid and safer than resection, and infinitely to be preferred to the formation of an artificial anus.

In the cases narrated below the conditions were not such as were suitable to the performance of Barker's operation, but I hope at some future time to test its efficacy. In my two cases one was successful, but the other, owing to the tender age of the patient and the prolonged manipulation necessary to reduce so large an invagination, succumbed.

CASE 1. *Intussusception in a child aged six; abdominal section; recovery.*—E. A——, aged six, was seen by Dr. Finley on the afternoon of Feb. 13th, 1892. She complained of severe abdominal pain, which commenced about 8 A.M. and was attributed by the mother to over indulgence at a Sunday school feast attended the night before. The child had vomited several times during the day; next day a considerable amount of blood and mucus was passed per rectum. On Feb. 15th pain and vomiting continued; pulse rapid and small; temperature normal; tongue thickly coated. Now for the first time Dr. Finley discovered a small indistinct tumour below the ribs in the left side and outside the linea semilunaris. Recognising the case as one of intussusception and remedies proving of no avail I was called in to decide as to the expediency of operating. At 5 P.M. on Feb. 15th the child was put under ether, and a rectal examination immediately revealed a sausage-shaped tumour. No tumour could at this time be felt in the abdomen above. The tumour could be pushed back, but it almost immediately returned. Water was forced into the rectum in large quantities, and for a time the tumour disappeared from the rectum, but reappeared in the abdomen, and after a few minutes was again seen presenting at the anus. This procedure was repeated several times, when, not wishing to lose any more time, I advised removal to hospital and immediate abdominal section. This was done, the operation being performed about 8.30 P.M. The tumour could still be easily felt through the rectum, though it did not now pass the anus. The child having been placed under chloroform, a median incision was made below the umbilicus and the abdominal cavity opened; the finger was introduced and a tumour felt, which on slight traction of the bowel immediately disappeared. The abdomen was now most carefully examined to find if any other tumour existed, as I could hardly believe that the invagination could have been relieved with so little manipulation. On examining the bowels the descending colon was found to be deeply congested at one point, and near this a scybalous mass was felt in the bowel; it seemed like a foreign body, but could be easily moved on. The wound was closed with a few silkworm-gut sutures and dressed with absorbent cotton. The child did perfectly well and had a natural stool within twenty-four hours. In ten days she was discharged from the hospital and has been in good health ever since. In this case the tumour was distinctly felt through the rectum before the abdominal incision was made, and immediately before entering the hospital the child had passed considerable quantities of bloody mucus, and had experienced much pain and vomited, yet the opening of the abdomen followed by the slightest manipulation of the intestine, was sufficient to reduce the invagination. It may be that the intussusception had already begun to be relieved before operation was undertaken and that the operation merely hastened the process. Still the fact remains that after several attempts at reduction by forcing water up the rectum the tumour still could be felt and seen at the anus, and that it did not disappear until the abdomen was opened.

CASE 2. *Intussusception in an infant aged seven months; operation; death.*—B. D——, a strong healthy infant, aged

[1] A paper read before the Canadian Medical Association at Ottawa, Canada, Sept. 14th, 1892.

[2] THE LANCET, Jan. 9th, 1892.

seven months, began to suffer from severe pain, accompanied by vomiting and the discharge of bloody mucus per rectum, on May 6th, 1892. Dr. Elder was called in on Sunday, May 8th, and immediately recognised the case as one of intussusception, a dark-coloured tumour presenting at the anus. I was consulted about the case and advised immediate removal to hospital. At 6 P.M. on May 8th I first saw the patient. At that time she was suffering considerable pain and had extreme distension of the abdomen. Protruding from the anus was a dark-red sausage-shaped tumour, which, on examination, proved to be an intussusception. Abdominal section was immediately decided upon, as the employment of other methods of relief was thought to be useless owing to the condition of the patient and the length of time the affection had lasted. The child was placed under chloroform, and an incision three inches long was made in the median line, commencing at the umbilicus. On opening the peritoneal cavity the distended intestines immediately protruded. So great was the distension that it was useless to try to reach the seat of the intussusception without allowing the intestines to protrude. The greatly distended small intestines which extruded themselves were covered with hot towels. Now the tumour was easily found, and it filled the true pelvis. The tumour, on examination, proved to be a greatly distended rectum, into the upper end of which some small intestine was seen to pass. With the exception of the rectum, no large bowel was to be seen. I tried to release the bowel by moderate tension, which was gradually increased, but without effect, although there were no evidences of inflammatory adhesions present. Feeling that it would be useless to employ any more force, the large bowel (rectum) was incised longitudinally and the intussusceptum exposed. The incision gave exit to a large quantity of dark grumous bloody fluid. Efforts at reduction from within were now made, and, aided by an assistant's finger in the rectum, I managed to release some of the bowel. First came a portion of the lower end of the ileum; the cæcum and appendix came next like a cork out of a bottle, and the rest of the large intestines slowly unfolded themselves. A lump still remained, however, and it was found to be another intussusception, which was invaginated from below upwards. This was easily relieved, and all parts of the bowel were free. Many portions were much congested, but there were no evidences of inflammatory adhesions. The incision in the rectum was now rapidly closed with a continuous Lembert's suture of fine silk and the abdominal wound sewed with silkworm gut, a glass drainage-tube being inserted at its lower end. The patient suffered much from shock after the operation and only lived some three hours. In this case the large amount of the invaginated bowel, the great distension and the amount of manipulation necessary to relieve the invagination, taken together with the tender age of the patient, were quite sufficient to cause death. Although there were no inflammatory adhesions, still the difficulties of reduction were great and invagination could not have been relieved without incising the bowel. The obstruction to reduction was manifestly the bowel about the ileo-cæcal region. It seems to me that incision of the bowel and relief of the tension, with pushing of the invaginated bowel upwards, are better methods of treatment in non-gangrenous cases than either tubal anastomosis or the establishment of an artificial anus. If the bowel should prove gangrenous, then Mr. Barker's operation could be easily proceeded with.

Montreal, Canada.

THYMOL AS AN ANTHELMINTIC REMEDY.

BY PROSPERO SONSINO, M.D. PISA.

THE history of the greater number of new drugs proposed as remedies is generally as follows. A certain substance is suggested as a remedy against a particular disease. After some hesitation we find the new drug extolled by numerous observers in every quarter of the medical world—as yet, however, only as against one particular disease. After a time its use is generalised, as it were, and extended to other ailments, and we now find its virtues lauded in many cases and many diseases. By-and-bye a reaction sets in, drawbacks are discovered, it is no longer the general panacea, and it is only after a long time that the true therapeutical position of the drug is at last defined, if it does not eventually fall into complete disuse and oblivion. It seems that thymol is now passing through the common ordeal: it was first used by Bozzolo[1] in 1880 against anchylostoma. After some hesitation its efficacy was confirmed by many practitioners, and it is now accepted as the best remedy in anchylostomiasis in such a manner that it has generally superseded the liquid extract of male fern, which was the only other remedy that for some time could compete with it; but the efficacy of thymol in anchylostomiasis was hardly well established when already it was tried in other ailments, and especially as a general anthelmintic remedy. At the present time, if we would trust the assertions of some hasty advocates, it is the best remedy against all the intestinal worms, tænia among the number, and also against hæmatozoon, as filaria sanguinis hominis nocturna. I think great credit is due to Dr. Crombie[2] of Calcutta for having shown that about ten grammes per diem of thymol, given for three successive days, are not enough to cause the disappearance of the embryo filaria from the blood, contrary to what has been asserted by others who state that daily doses of some fraction of a gramme of this drug, taken for a certain number of days, are sufficient to cure radically filarial disease. We have seen more recently this inefficacy of thymol against filariæ sanguinis hominis confirmed by Dr. Manson.[3] Perhaps Dr. Crombie has been too hasty in believing that thymol, while impotent in the case of the filariæ of the blood, is nevertheless effective against intestinal worms, tæniæ included. I desire to bring forward in the columns of THE LANCET the result of my experience on this subject. Whilst I have had numerous brilliant successes with thymol in anchylostomiasis, so that in this disease I can testify that it acts often as a charm, I must confess that there are some cases, rare it is true, in which I really found difficulty in ridding the intestine of anchylostomes even with this remedy. I had recently in hospital a long-standing case of chronic disease, which was complicated with anchylostomiasis. The administration three times of a total daily dose of four grammes brought away in all thirty-one anchylostomes; but even after the third administration of the drug the stools contained anchylostoma eggs in as great abundance as previously to the commencement of the thymol treatment, and as they are found in the stools of patients from whom thymol expels some hundreds of anchylostomes, I could not explain in a reliable manner the cause of this non-success. I argued that it might be due to the circumstance of there being a certain number of worms hidden in the walls of the intestines and others under the folds of the valvulæ conniventes in such a manner that the thymol may have passed without exercising its toxic action upon the parasites, or it might have been that an extraordinary abundance of tenacious mucus enveloped the worms, and so preserved them from the action of the remedy. Unfortunately the patient, who one year before had been operated on for an abscess of the liver, and who had fallen into a state of marasmus from diarrhœa and vomiting, became worse, and, seeing his end approaching, preferred, in September last, to leave the hospital and go home to die. Consequently no post-mortem examination could be obtained whereby the number of anchylostomes could have been counted, and the reason for their non-expulsion by the thymol explained. Such rare cases as this of non-success must not detract from the merits of thymol as a remedy against anchylostomiasis. I wish, however, to insist that its efficiency in anchylostomiasis cannot in any way authorise us to proclaim it a universal anthelmintic, applicable to all intestinal worms, without positive proofs of its efficiency in the case of each individual species of parasite. I can assert that the only worms I have occasionally seen expelled along with the anchylostoma after the administration of thymol were ascaris lumbricoides, oxyuris vermicularis, and trichocephalus dispar. But whilst the expulsion of anchylostoma is the rule with thymol, this drug acts on the other worms mentioned only exceptionally, in the majority of instances failing entirely to cause their expulsion. Consequently in ascaris lumbricoides I cannot trust to thymol so much as I can to other ordinary remedies, such as santonin, for which I now prefer, on account of its insolubility, to substitute its product santoninossima, introduced by Coppola. As for oxyuris vermicularis, which, on account of the liability in the case of this parasite to self-

[1] Bozzolo: Virtù di un Rimedio Nuovo (Gazzetta degli Ospedali di Milano, 1882, No. 1).
[2] THE LANCET, Aug. 13th, 1892.
[3] THE LANCET, Oct. 7th, 1892.

infection, is of all the intestinal worms perhaps one of the most difficult to completely eradicate, I have not found that with thymol we can get rid of it more completely than we can with the other means at our disposal, especially when they are applied by enema. Respecting trichocephali the difficulty in procuring their expulsion with any remedy is well known. After my first trials, in which I found in some cases trichocephali in the stools following the administration of thymol, I entertained the hope that this drug might prove an efficacious remedy against this worm. As the ordinary seat of the worm is the cæcum, I suggested that its expulsion might be better assured by using thymol in enema. But if used in this way, as the thymol must be given in solution, I now fear that it could not be administered in doses sufficiently large to prove efficacious without proving hurtful to the organism of the host from absorption. Indeed, thymol introduced into the circulation is certainly a poison, even in small doses. If we risk giving it in such large doses as four, six, eight, and even ten grammes per diem, it is only because we administer it in powder, and can trust that, if absorbed at all, it will only be so in a very minute amount. The evidence of absorption having taken place is afforded by the patient being attacked with vertigo, and by his urine becoming brownish. These unpleasant symptoms are only met with in rare cases after the administration of such a dose as four grammes of thymol. From what I have said I think it will be seen that thymol will not prove so sure a remedy against the three næmatodes named as it is against anchylostoma. As for tæniæ, I have never tried thymol against tænia solium or tænia mediocanellata, because I think that pelleterine properly administered is now the best remedy against the large tapeworms. I can say, however, that in cases of anchylostomiasis complicated with tænia nana I obtained with thymol the expulsion of the former, but not of the latter. The tæniæ were expelled only after recourse was had to the liquid extract of male fern and calomel. In a case of tænia nana in a child two years of age I succeeded the other day in bringing away more than 1000 specimens of this small cestode with only one gramme and a half of liquid extract of male fern combined with fifteen centigrammes of calomel.

I have never read of any well-ascertained instances of expulsion of the large tapeworms by thymol, and I should be grateful to Dr. Crombie or to any other practitioner for publishing such cases, with full particulars, if they are acquainted with such cases. Indeed, it seems to me that the results of Bozzolo's and Lutz's experience, though contributing perhaps to the wider adoption of thymol as a general anthelmintic, especially against tæniæ, are not so conclusive as to replace pelleterine by thymol. Bozzolo, in the work cited, speaks only of a case in which after the use of thymol he did not succeed in seeing the scolex with the strobila. He adds that the patient (a woman) after eight months had not passed any proglottides, and that she felt well. Lutz,[4] in his last work, says he has never seen the complete expulsion of a cestode by thymol; nay, in two cases of bothriocephalus he has ascertained that after some time the patients still suffered from the presence of the worm. Only in some cases of tænia had he noticed that after incomplete expulsion the worm no longer appeared. After all, Lutz only declares that thymol had proved for some patients the more agreeable remedy, but at the same time he put it in the second line, and after pelleterine and koussine. Giles,[5] who more recently has had the opportunity of trying thymol on a large scale against the anchylostoma in Assam, says that he had no occasion to try it against tænia; but that from what he gathers from others thymol would appear to be a far more efficient vermifuge in dealing with tæniæ than male fern or any of the other drugs more commonly used for that purpose. But among the latter he does not mention pelleterine. Having nowadays at our disposal pelleterine, I think it useless to have recourse to thymol, which certainly offers more drawbacks than pelleterine. Dr. Walker,[6] in Sandakan Hospital (British North Borneo) and Giles, in Assam, each obtained once the expulsion of a specimen of distomum crassum by thymol used against anchylostoma. Certainly these two observations (up to the present there are no facts telling against them) are in favour of the efficiency of thymol against the large Asiatic fluke. But we cannot forget that in a case cited by Cobbold the expulsion of several specimens of this fluke followed the employment of a milk diet simply; and in other cases the same result has followed a milk diet unaided by any other treatment.

To conclude, I think it would be a therapeutical mistake to infer that a substance which is truly efficient against some given parasite must also prove successful as a general anthelmintic. Experience teaches us the contrary in the case of every drug having an action on some particular worm. As for thymol, I can assert as the result of my experience that it is an effective agent generally against anchylostoma, but very uncertain against the other three intestinal nematodes I have referred to, and entirely ineffective against tænia nana. As for the method of administering thymol, I think that the best plan is to give it in powder in wafers or cachets. I find that tabloids are not of any advantage, because so many have to be taken at a time if we wish to introduce the drug in doses of several grammes, and that the thymol being acrid, the direct contact with the mouth might prove hurtful.

Pisa.

[4] Klinisches über Parasiten des Menschen &c.: Centralblatt für Bakteriologie und Parasitenkunde, 1888, Band iii.

[5] A report on Beri-beri. Shillong (Assam), 1890.

[6] Two cases of Beri-beri associated with Distoma crassum and Anchylostomum duodenale &c., by J. H. Walker, M.D.: Brit. Med. Jour., Dec. 5th, 1891.

ON THE

METHOD OF ESMARCH AND BIER FOR THE CONSERVATIVE TREATMENT OF TUBERCULOUS JOINTS.

BY HERBERT W. PAGE, M.A. CANTAB.,
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IN September last I had the good fortune to make a visit to the hospital at Kiel in company with Professor Esmarch and his assistant, Dr. Bier, and was shown a series of cases illustrating a new method of treating local tuberculous affections which I wish to bring to the notice of English surgeons.

A short account of the plan from the pen of Dr. Bier had indeed already appeared in the supplement of No. 32 of the *Centralblatt für Chirurgie* of this year, which contains a report of the proceedings of the twenty-first Congress of German Surgeons held in June; but it escaped my notice, as doubtless it has escaped that of other surgeons in this country. The treatment advocated is, however, of so much interest and apparently of such value that I deem it right to record this notice of it now, even though I have myself had no sufficient opportunity of putting it into practice. The original paper of Dr. Bier is entitled "A New Method for the Conservative Treatment of Joint Tuberculosis," and in it he says that more than twenty cases had been treated by continuous passive hyperæmia (dauernder passiver hyperämie). The old observation that passive congestion of the lungs (Stauungslunge) provided, or seemed to provide, immunity against tubercular infection had led to the suggestion that purposely induced congestion of a part might have a like effect. Accordingly the idea had been put into practice by the following simple procedure, much after the manner of Helferich, for the treatment of ununited fractures. If, for example, the part affected is an elbow-joint, the fingers, hand and arm are bandaged up to a point immediately below the articulation, while directly above it the arm is next encircled with an inch-wide elastic band sufficiently tight to impede but not arrest the circulation, and so presently induce a passive congestion and swelling of the intervening zone. It is necessary, he says, to protect the skin from direct pressure of the elastic band by a piece of lint or bandage beneath it, and the exact site of its application must be changed from day to day. In most of the cases where this plan had been carried out in Professor Esmarch's clinic marked and rapid improvement had set in, and in no instance had any harm ensued. Dr. Bier says that he had also induced active hyperæmia, but without good result. He does not state precisely how this was done.

This plan of treatment by passive congestion was that which I saw in the hospital at Kiel. To take a couple of instances which recur to my mind: there was a case of tuberculous synovitis of the elbow in a young woman. Under the method of bandaging described the whole joint area was of a reddish-purple, congested appearance. Painful and starting before the treatment had been begun, the joint was now free from pain, even though no attempt was being made to keep the part at rest. In fact, I was assured that splints were wholly unnecessary, and that the limb might be used as much as the circumstances of its imprisonment in bandages would allow. Although the method of treatment is somewhat painful for a day or two at first, the part is soon free from discomfort of

any kind; manipulation in this particular instance caused no pain, and the patient said the arm was very much better. Her complete recovery was expected. Not less striking was a case of tuberculous ulceration of skin due to inoculation. A young man had used milk to remove old tattoo marks. I did not learn the exact method he had adopted; but there seems to be a belief that milk can eradicate tattoo marks, by rubbing out the black with white. At any rate, in this patient the sites of the tattoos, three or four in number, immediately above the left wrist were now occupied by tuberculous lupoid ulcers, and I was informed that investigation had proved that the milk the man had used was taken from an infected cow. Suffice it to say that there were now sores of unquestionably tuberculous lupoid aspect, and one of them, of the size of a florin, had healed entirely under the method described and without any local application. This patient came to the hospital every morning to have his fingers and hand bandaged and the position of the encircling rubber band changed. Amongst other cases being treated in the same way were a tuberculous swelling of knee-joint and a tuberculous epididymitis, both of which I was assured were notably improving. The plan was said to be suitable for local tuberculosis of the skin and for tuberculous affections of synovial membranes, but not for disease of cartilage or bone. For the treatment of many other cases it is obviously inapplicable.

I have thus described what I saw, and make no apology for a communication without experience of my own, feeling that anything new in the clinical work of a surgeon so illustrious as Professor Esmarch of Kiel cannot fail to be of interest to many besides myself. This plan of treatment will at any rate give occasion for speculation and thought, and certainly for much scepticism also. When the treatment of tuberculous affections by the injection of Professor Koch's tuberculin was being tried, it was often remarked that in the local inflammatory reactions probably lay any good which followed. Mr. Hutchinson recurs to the subject in a short paper on the "Benefits accruing from Erysipelas," in the last number of his Archives,[1] where, after speaking of the benefits which accrue to lupus vulgaris from attacks of erysipelas as matters of frequent and general observation, he goes on to say: "The local effects of Koch's treatment, when good reaction was obtained, were not dissimilar from mild erysipelas, and it seems possible that their beneficial results may have been due simply to the febrile disturbance evoked." The plan of treatment here described, as seen at Kiel, brings about a local disturbance not altogether unlike the local disturbances induced by Professor Koch's inoculations—disturbances which seem to show that the quantitative and qualitative alterations in the blood and blood stream which we know by the name of inflammation may have an influence directly antagonistic to the growth and multiplication of micro-organisms. Comparatively harmless when circulating in the blood current, their opportunity comes when they have made their way out of it or are arrested in it, and the flushing of a part with blood in the inflammatory process may have its good effects not so much from flushing and washing alone as from the fact that living, fluid, healthy blood, is itself the best protective against the growth of living organisms foreign to their host. More blood is wanted for the purpose of protection than the natural rate and character of the circulation provide, and the artificial increase and delay of it in the neighbourhood where the organisms have made a lodgment by the method of Professor Esmarch and Dr. Bier may bring just that amount of extra help which the tissues of the part require successfully to overcome the tubercle bacilli and put an end to the consequences which their presence entails.

My object, however, is not to speculate on the *rationale* of the plan, but to ask English surgeons to try it, that haply they may find in it, as at Kiel it is said has already been found, an effective means for dealing with local tuberculous disease.

[1] Vol. iv., No. 13, p. 79.

A MEETING of the British Medical Temperance Association was held on Tuesday at 20, Hanover-square, W., presided over by Dr. B. W. Richardson. Dr. Norman Kerr read a paper on some recent returns of the consumption of alcohol in workhouses. He stated that a decided decrease had taken place in the use of alcohol in workhouses as compared with former returns, and that the condition of the inmates as regards health, comfort and discipline had shown a corresponding improvement. He suggested that a leaflet should be prepared to instruct parents as to the injurious effects of supplying intoxicating drinks to children. Resolutions to the same effect were moved and carried.

CHOLERA AND DISINFECTION IN ST. PETERSBURG.

BY FRANK CLEMOW, M.D.

THE importance of thorough disinfection in the presence of cholera is so universally recognised that no apology is needed for the following notes on the methods advocated and employed in St. Petersburg during the present epidemic. In the large hospitals of this city, where as many as two or three hundred cholera patients have been under treatment at the same time in one institution alone, the question of disinfection has been one of the first importance, not diminished by the facts that all the liquid portion of the excreta passes directly into the drains, the drains open into the canals which intersect every part of the city, and the canals communicate directly with the river Neva. Various methods have been used for the disinfection of the dejecta, of wearing apparel, of bed linen, of the walls and floors of rooms or wards, of furniture, and finally of closets, dustbins and drains. In the following notes each of these objects is considered in the order named. The dejecta naturally claim the first place. The most usual method employed has been to add to them a solution of carbolic and sulphuric acids. This solution is prepared as follows: To three parts by weight of impure carbolic acid (50 per cent.) add one part of sulphuric acid; this must be done slowly, with sufficiently long intervals to prevent the development of heat, and with constant stirring. It is advisable to surround the vessel containing the mixture with ice or cold water. The mixture is allowed to stand for two or three days. When required for use it is diluted by adding 1½ lb. to 1¾ lb.[1] (615 to 682 grammes) of the mixture to a vedro (21½ pints or 12·3 litres) of water, with energetic stirring. In this way is produced a from 5 to 6 per cent. sulpho-carbolic solution. The dejecta having been collected in wooden barrels, well tarred on the inner surface, an equal amount of the sulpho-carbolic solution is added and the mixture stirred. This has been found by experiments made by Dr. Levin at the Obuchovski Hospital to be efficient, attempts at cultivations from the dejecta thus treated having proved abortive. But as heat is considered the most absolutely certain method of sterilising fluids, the further process of boiling the dejecta has been adopted. The Alexander Hospital, founded in memory of Professor Botkin (the large city hospital for infectious diseases, devoted this summer entirely to cholera cases), enjoys the distinction of being probably the only hospital in existence possessing an apparatus for boiling all infectious dejecta. It is unnecessary to describe the apparatus fully here, as it is the intention of Dr. Richard Sisley to show drawings of it, with full explanations of its working, at an early meeting of the Society of Medical Officers of Health. It need only be stated that not only the dejecta, but also all fluids from the post-mortem room are in this apparatus submitted under pressure of a temperature exceeding 100° C. before being allowed to pass into the drains. Another means used for sterilising dejecta has been to add a 20 per cent. milk of lime, prepared as follows: To 20 parts by weight of lime, which should preferably be newly burnt, are added 80 parts of water in a wooden or earthenware vessel, slowly and with constant stirring. After this solution is added to the dejecta the mixture should be allowed to stand for three or four hours. A solution of chloride of lime may also be employed of a strength of from 2 to 4 per cent.

Wearing apparel is treated according to the material of which it is made. All linen garments (to which may be added sheets, towels &c.) are on removal from the patient rolled up in a sheet or put into a bag moistened with a 4 per cent. solution of chloride of lime and removed to the disinfector. They are immediately placed in a hot solution of carbolic acid and soap and allowed to soak for one hour. This solution is prepared thus: Pure carbolic acid (100 per cent., if of less pure quality some of it remains undissolved and may stain linen) is added to a solution of soap in water in the following proportions: To one vedro (21½ pints or 12·3 litres) of water, in which are dissolved 1½ lb. (615 grammes) of soap, are added 200 grammes of the acid. The solution should be clear and of a yellowish colour; it is used at a temperature of from 50° to 80° C.

[1] In the Russian Pharmacopœia one pound (fluid or solid) equals 12 oz. Throughout this paper the Russian pound alone is spoken of.

Woollen clothes, and indeed all articles that are not spoilt by moist heat, are disinfected by the action of steam at a temperature of 100° C. This question has received the most detailed consideration at the hands of Dr. Krupin, who is in charge of the large disinfecting camera at the above-mentioned Alexander Hospital. Here the chamber into which the steam is admitted is rectangular; at each end of the chamber is a door opening into separate rooms, the one for receiving infected articles, the other for removing them after disinfection. A thermometer is inserted in the centre of the articles with an automatic arrangement for ringing an electric bell as soon as the temperature at the point where the thermometer lies reaches 100° C. From the time that the bell rings the articles are left in the apparatus for from half an hour to one hour. From the designs of Dr. Krupin a firm of engineers in St. Petersburg has supplied a number of smaller disinfecting chambers of cylindrical form to many of the other hospitals of the city.

A simple and inexpensive method of improvising a steam disinfector is described in a circular of the Medical Department of the Ministry of the Interior issued this year, but I have not seen one in use. It is described as follows: On the top of an ordinary kitchen or washing boiler is placed a simply made cask or barrel, which should closely fit by its lower edge to the upper edge of the boiler. In the bottom of the cask are pierced a large number of holes; in its lid, which should fit tightly, are two small holes, in one of which is fitted a cork transmitting a thermometer, the other being a very small one for the exit of steam. Inside the barrel are screwed hooks on which to hang the articles to be disinfected. The boiler being heated, steam enters the cask by the holes in the bottom, passes over the articles and escapes by the hole in the lid. The process is continued for an hour after the thermometer marks 100° C. Certain substances, such as leather and furs, are spoilt by steam, but objects made of wool, hair, down, feathers, linen, hemp, cotton, silk, cloth of all sorts, velvet or plush, such things as books if unbound, mattresses, blankets and carpets may all be disinfected in this way without injury. Objects which are injured by steam are submitted to the action of chlorine gas in a specially prepared chamber. The disinfection of wards which have been occupied by cholera patients is effected at the Alexander Hospital by thoroughly syringing the walls, ceiling and floor with a solution containing one part of corrosive sublimate and one part of chloride of sodium in 1000 of water, followed by thorough ventilation for some days. The use of a 10 per cent. milk of lime is also recommended for ceilings and walls; and for floors a 4 per cent. solution of chloride of lime or a hot solution of carbolic acid and soap, as described above. In papered rooms the paper must of course be removed before using the milk of lime to the walls. For pouring down closets, cesspools, dustbins, drains and sinks lime is chiefly used. The quantity requisite for disinfection is calculated thus: For every 100 persons in health not less than one pound of pure lime should be used—i.e., of a 20 per cent. milk of lime at least 5 lb., of a 10 per cent. at least 10 lb.; while for every 100 cholera patients ten times these quantities should be allowed. This calculation is based on the units of 1 lb. of excreta per day per head in health and of 10 lb. per head among cholera patients, and allows of one part of lime by weight to every hundred parts of dejecta.

Among the many excellent measures adopted by the St. Petersburg authorities none seems to have been more thoroughly useful than the institution of a corps of volunteer disinfectors. These men, 130 in number, were enrolled under the control of the municipal medical officers. Having first received a short course of lectures from Dr. Lipski, a prominent member of the Sanitary Commission,[2] and having been shown practical illustrations of the method of disinfection at the Alexander Hospital, the members of the corps were provided with detailed printed instructions as to their duties. These were principally to carry out disinfection of the rooms in the house to which they were sent, and to remove from the house to the disinfecting camera at the Alexander Hospital all clothes, bed linen, mattresses, pillows and any other movable objects that had been in contact with or soiled by the patient. The objects themselves were not disinfected before removal, but the box, basket or sheet in which they were packed was ordered to be well moistened with either a 1 in 2000 sublimate solution or a 5 per cent. carbolic solution, from a pulverisator provided for each man. The floors and walls and all furniture were ordered to be washed with a 1 in 1000 sublimate solution, and finally with a 1 per cent. solution of soda. With the permission of the owners, any articles of small value were ordered to be burnt. It should be added that each member of the corps of disinfectors received a payment of 30 roubles (£3) per month.

Previously to the formation of the body of disinfectors measures had been taken to ensure a plentiful supply of disinfectants at a cheap rate. In June a circular of the Ministry of the Interior ordered all chemists, not only in St. Petersburg but throughout the empire, to lay in a stock of disinfectants, which they were permitted to sell only at fixed rates—the cost price without charge for dispensing (*taxa laborum*). Early in July the tax on disinfectants brought from abroad was removed by an order of the Minister of Finance.

I cannot conclude these notes without expressing my thanks to Dr. Krupin, Dr. Lipski and other St. Petersburg physicians who have kindly explained their views on disinfection or given me practical illustrations of the methods above described.

St. Petersburg.

[2] The Sanitary Commission has been in existence for some years in the Russian capital. It has entire control of all sanitary measures, and shares with the Hospital Commission the medical administration of the city. Special Commissions were formed on the approach of cholera to examine the sanitary condition of every building in the city and to investigate the nature of the first cases that occurred.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL AND THERAPEUTICAL.

VOLVULUS OF SIGMOID FLEXURE WITHOUT SYMPTOMS.

BY CECIL F. BEADLES, L.R.C.P. LOND. &c.,
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A MAN nearly seventy-two years of age, who had been an inmate of this asylum for two years and a half, but whose mind had been affected for thirty-two years, died somewhat suddenly under the following circumstances. He had attacks of excitement, with hallucinations of a suicidal tendency. Since admission here he had been in a more or less feeble state of health, with an aortic systolic bruit. He had been quiet for several months past, and was able to get about and do a little work. At 10 A.M. on Oct. 17th I was called to see him, as he complained of pain in the left hypochondriac region. This had only just come on; but beyond telling me of this pain he complained of nothing else, and there were no other symptoms. On examining the heart the sounds were irregular, and there was a murmur present; pulse fairly good. As his bowels had not been opened for three days, I ordered a dose of castor oil and had him put to bed. The bowels not acting, he had a simple enema a few hours later, which was only partly retained, but it brought away some fæcal matter. Towards evening the abdomen became distended, and he died at 7.30 the same day. There had been no vomiting and comparatively little pain.

Post mortem the brain was such as is common in the insane, with thickening of the membrane and an excess of fluid. The heart presented hypertrophy of the left ventricle, with mitral stenosis; there was slight atheroma of the aorta above the semilunar valves; the pericardium contained about two ounces of clear serous fluid, with no adhesions. There was no other point to note beyond the condition of the intestines. On opening the abdomen there was at once seen a coil of large intestine, which was enormously distended and of a black colour. It completely hid from view all the other abdominal viscera, and had its fixed point at the brim of the pelvis on the left side, with its loop upwards. This was found to be the sigmoid flexure; it was twice twisted round itself at the fixed spot, and could be undone with ease. On removing this portion of the bowel it was found empty with the exception of a little blackish fluid, but the whole of the sigmoid flexure was of a black colour both externally and internally. The rectum and the lower part of the descending colon were empty; the rest of the intestine was slightly inflated. No stricture existed at the seat of the twist. The strangulation must have existed over twenty-four hours, and yet there was

an entire absence of symptoms beyond some pain during the last ten hours. I mention this case as an instance of the difficulty in diagnosis so often associated with insanity.

Colney Hatch.

THE EFFECT OF ERGOT ON THE INVOLUTION OF THE UTERUS DURING THE LYING-IN PERIOD.

BY G. ERNEST HERMAN, M.B. LOND., F.R.C.P. &c.,
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IN the Transactions of the Obstetrical Society of London, vol. xxx., for 1888, will be found a paper by Dr. C. Owen Fowler and myself, in which observations are detailed pointing to this general conclusion: "That the administration of an ergot mixture during the first fortnight of the lying-in period appreciably increases the rapidity with which the diminution in size of the uterus goes on." This conclusion was reached by comparing the average rate of involution (*a*) in a number of cases, taken without selection, in which ergot was given, with (*b*) the average rate of involution in an equivalent number of cases, also taken without selection, in which ergot was not given. In the Annales de Gynécologie, vol. xxix., for 1888, p. 175, is published an investigation by Dr. Émile Blanc of Lyons, conducted in a very similar way, but which led him to the conclusion that "ergotine administered during the first five or ten days of the lying-in period exerts no favourable influence on uterine involution." Dr. Blanc's research was quoted at the time in several English journals. These two investigations seem to contradict one another. I desire to point out that they do not; but that, on the contrary, they confirm one another and show the real value of ergot in the lying-in period. The reason that Dr. Blanc's conclusion differs from that of Dr. Fowler and myself is this, that he *chose* the cases in which to test the effect of ergot. He took only cases of "normal delivery at full term, excluding premature labours, cases with febrile disturbance, and all cases needing any intervention" (p. 177). These cases excluded are just those in which the causes known to hinder involution are present. Dr. Fowler and I took cases without any selection, and therefore among ours were included cases in which the causes of subinvolution were present. Dr. Blanc's research shows that in a normal lying-in the uterus completes its involution as well without ergot as with it. The paper by Dr. Fowler and myself shows the beneficial effect of ergot in counteracting the causes which retard involution. Dr. Blanc's paper contains nothing in opposition to this view; on the contrary, he expressly says: "Against secondary hæmorrhage the drug maintains its position. Its action is the more efficacious the nearer the delivery." The practical conclusion is, that while in a perfectly normal lying-in ergot is not required, yet when any cause of imperfect involution is present, or suspected to be present, ergot given throughout the lying-in period will counteract its influence, will promote involution, and should be given.

Harley-street, W.

TWO CASES OF XANTHELASMA OF THE HAIRY SCALP IN INFANTS.

BY TOM ROBINSON, M.D. BRUX., L.R.C.P. LOND. &c.

CASE 1.—An infant sent to me by Dr. Currie on Oct. 26th It is an only child fourteen months old. The father and mother are exempt from any skin disease, and are sound, healthy parents. The child was delivered by Dr. Currie with forceps, and the nurse (an unusually intelligent woman) says in the following morning she noticed a patch in the position of the present eruption, which looked as if it had been scratched by the blade of the forceps. This patch has never disappeared, and has become more obvious as time has elapsed. It varies a good deal in colour; sometimes it will "go a deep pink for some days, then it suddenly shades off and becomes paler." The child is a breast-fed infant, is plump and healthy looking, and has excellent health. On the right side of the skull, stretching from about the middle of the sagittal suture downwards and forwards, is a streak of raised tissue, with well-defined edges, slightly scaly on its surface, and with a few, very few, fine straggling hairs scattered sparsely over the area. It feels like ordinary skin and becomes obviously paler when stretched.

CASE 2.—This child is four years old, and has a streak corresponding in colour and appearance to the one fully related, with the exception that the plaque is on the left side and runs almost parallel to the sagittal suture. In this instance the birth was a normal one and the child is perfectly healthy.

The two cases enumerated are, in my experience, unique in the occurrence of a well-marked xanthelasmic patch on the hairy part of the skull, and in being congenital. The malady, or the symptom which is seen on the eyelids, has received enlightenment from almost every dermatologist of this century. One other feature of the two cases was the distinct statement that the patches varied in colour. At this we cannot feel any amazement, because experience shows that the ordinary plaques of xanthelasma palpebrarum vary much in their colour, and it is well known that those who suffer from migraine often betray their condition by a dark stain below or around the orbit. Dr. Currie was quite prepared to accept the doctrine that, in his case, the wash-leather patch was caused by the blade of the forceps, and had I seen this instance only I should doubtless have accepted the same explanation, but my second case negatives this opinion.

Princes-street, W.

SEQUEL TO A CASE OF EXCISION OF THE ENTIRE GRACILIS FEMORIS MUSCLE FOR TUMOUR NEARLY FOUR YEARS AGO.

BY A. MARMADUKE SHEILD, M.B. CAMB., F.R.C.S. ENG.

THE history of this case and a description of the specimen are recorded in the Pathological Society's Transactions for 1890. The operation was performed in August, 1889, on account of a large pear-shaped tumour on the inner aspect of the right thigh. This was found to involve the gracilis muscle, and the tumour was removed by cutting the tendinous insertions of the muscle at the pelvis and knee. There were two small nodules in the lower part of the rectus femoris, and also in the cellular tissue over the adductors. The tumour was thought to be a sarcoma, syphilis having been excluded by treatment. The Morbid Growths Committee of the Pathological Society decided, however, that the tumour was a myxo-fibroma. It was noteworthy that the boy had webbed toes, as showing a tendency to congenital peculiarities. I showed this patient to some of the Fellows of the Medical Society on Monday, Nov. 7th. The boy is in excellent health, having grown and thriven well. There is an increase in the ill-defined, fibrous-feeling mass over the adductors, but the nodules in the rectus have quite gone. The loss of the muscle makes no difference to his progression, and he is a good athlete. The sequel of interesting cases is frequently as important as their early relation. Excision of muscles for tumours has generally been followed by rapid recurrence. As nearly four years have elapsed the strong presumption is that this growth is non-malignant, and the case forms an important, perhaps almost unique, exception to the general results of excision of tumours of muscle.

Stratford-place, W.

ROYAL COLLEGE OF SURGEONS, ENGLAND.—In addition to the list of names which we published in our issue of Nov. 5th (p. 1079) of those gentlemen who had been admitted Licentiates of the Royal College of Physicians, the following have been admitted Members of the Royal College of Surgeons: W. E. Alldridge, L.S.A.; H. M. Holt, L.S.A.; S. Y. Howell, M.D., New York; A. Lockhart, M.B., Kingston, Canada; J. F. Rudall, M.B., Melbourne; A. E. Syme L.S.A.; and S. E. A. Zichy-Woinarski, M.D., Melbourne.

MEDICAL MAGISTRATES.—Dr. Thomas Starkey Smith of Warrington; Dr. Richard Purnell of Wells, Somerset; Dr. Ptolemy Samuel Henry Colmer of Yeovil; Mr. Thomas Browne Anstie, M.R.C.S., of Devizes; Dr. Augustus Johnston of Ambleside; Dr. William Whitford of Liverpool; Mr. Joseph Kellett Smith, L.R.C.P.Edin., M.R.C.S., of Liverpool; and Dr. John Bligh of Liverpool have been added to the Commission of the Peace for the boroughs of Warrington, Wells, Yeovil, Devizes, Ambleside and the city of Liverpool respectively.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se compare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

A CASE OF CONTRACTED KNEE TREATED BY TENOTOMY BY THE OPEN METHOD.

(Under the care of Mr. FREDERICK TREVES.)

THE advantages of the operation which Mr. Treves performed in the following case are obvious and it does not appear that so good a result could have been obtained by any other method. Although many of our readers may not be inclined to agree with the operator in all he says as to the desirability of employing the open method in other deformities where the subcutaneous method is now employed, most surgeons of experience will probably call to mind instances of contraction of the knee similar to that recorded in which this operation might have been employed with much benefit. The contraction of fasciæ and cicatrices has often proved an insuperable obstacle to complete extension after division of the tendons. Helferich,[1] in a case of bony ankylosis of the knee, found after the removal of a wedge-shaped piece of bone that it was not possible to straighten the limb without an amount of force which appeared unjustifiable. He therefore turned the patient on his face, made two longitudinal incisions corresponding to the lateral margins of the popliteal space, and from these divided the fascia transversely, as well as the tendons of the biceps, semi-membranosus and semi-tendinosus. Gentle manipulations now sufficed to extend the knee. The result was very satisfactory.

A woman aged twenty-one was admitted into the London Hospital under the care of Mr. Treves on March 16th, 1892, with a contracted knee. She was delicate and a member of a phthisical family. The trouble was due to tuberculous disease of the joint, which commenced four years ago. The knee was kept for seven months in splints, and after these were removed the limb is stated to have been stiff and of little use. Eight months after the splints had been discontinued an abscess formed in the outer part of the popliteal space. This in due course made its way through the skin and discharged for a period of six months. Two years ago a tuberculous ulcer formed over the outer malleolus of the affected leg and had not healed; on admission it had a diameter of two inches. The patient had not been able to use the limb for about three years. The knee-joint was a little swollen and tender, but was free from heat; it was in the position of semi-flexion and was rigid. There was a faint indication of movement sufficient to indicate that the ankylosis was not bony. The ulcer was scraped and grafted and healed readily. The limb was suspended by means of two bands, one round the ankle and one round the thigh, and a moderate weight was placed upon the knee. Not the least improvement in position followed this measure. A back splint was then applied, and by the use of it further attempts were made to straighten the joint. These were quite without effect, and as an ulcer formed behind the ankle as the result of the pressure of the splint the instrument was abandoned. More than two months were devoted to attempts to straighten the limb by mechanical means, but without the least effect. On May 27th Mr. Treves divided all the contracted tendons and bands of fascia upon which the deformity depended. A rectangular flap of skin, which included the whole of the integument covering in the popliteal space, was dissected up. The contracted tissues were thus well exposed, and were divided with precision. The skin of the flap was marked by the scars of the old abscess. The tendons of the semi-membranosus and semi-tendinosus were divided, together with the iliotibial band of the fascia lata. The biceps was not severed. Much cicatricial tissue occupied the hollow of the ham. This appeared to be the principal cause of the contraction, and was divided to a considerable depth. The limb was brought into the position of full extension without the application of any force. The flap was secured in place by sutures. An anterior metal splint was applied, and by means of this the limb was suspended. The wound healed by first intention and without any rise of temperature. A back splint was applied on June 2nd, and later on the limb was secured in plaster. The patient was discharged cured on July 9th. The limb was then straight. The joint admitted of a little movement, and the patient could walk—for the first time for nearly four years—without artificial aid of any kind.

Remarks by Mr. TREVES.—The early operations of tenotomy were all performed by the open method, by a free incision or the forming of a flap and the deliberate division of the exposed tendon or band. The introduction of the subcutaneous method was an improvement, insomuch as it avoided the dangers of an open wound, which were at the time considerable. The introduction of aseptic surgery has rendered the precaution of a subcutaneous incision quite unnecessary; and as it is desirable that a knife should never be used in the dark and that a surgeon should know and see precisely what he is cutting, it would be well if the open method were once more to become the regular practice. In dealing with certain tendons, such as the tendo Achillis, I still carry out the subcutaneous incision, because the division can be perfectly made through a small puncture and an operation wound need be no larger than mere efficiency requires. With regard to other tendons, such as the sterno-mastoid, I have returned to the older method of operating. The present case serves to illustrate the value of this method. A subcutaneous operation in this instance would have been dangerous, uncertain and most imperfect. After the prominent tendons—including the biceps—had been divided the remaining adhesions would have been "broken down." This violent measure involves a deeply placed lacerated wound and is apt to be followed by much inflammatory reaction and by subsequent stiffening of the joint. The cicatricial tissue left in the track of the abscess appeared to offer a greater resistance to the correction of the deformity than did the prominent and easily reached tendons.

[1] Report of the Congress of German Surgeons: Arch. für Klin. Chir., Berlin, 1891. Sajous, vol. iii., G. 18. 1892.

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

A CASE OF FRACTURED HUMERUS WITH INJURY TO THE MUSCULO-SPIRAL NERVE.

(Under the care of Mr. F. PAGE.)

THE following is a short but interesting contribution to the series of injuries of the musculo-spiral nerve with fracture of the shaft of the humerus, which have required operation for the relief of resulting loss of function. The nerve was not apparently injured by the fractured ends, nor was it involved in the callus, as so frequently has been found on examination, but was covered and bound down by the periosteum and regained its functions when freed from it. The effects of the compression in this case were much the same as those met with when the trunk has been involved in callus, where, as Trélat[1] points out, motor and sensory changes are more common than those of nutrition. After the operation the nerve rapidly recovered its functions, more quickly than is usually found when callus has produced the compression; in such cases improvement is often delayed. For the notes of this case we are indebted to Mr. R. Sterling, house surgeon.

A miner aged thirty-eight was admitted under the care of Mr. F. Page on May 29th, 1892, complaining of inability to use his left arm. Four months previously while walking along a railway line he was knocked down by an engine and suffered a simple fracture of the arm. It was put up in splints and maintained in that position for five weeks, when it was found that his forearm and hand were practically useless. The seat of old fracture could be felt at the middle of the humerus. The upper end of the lower fragment projected to the outer side and behind about the position of the middle of the musculo-spiral groove. The muscles on the external aspect of the forearm were much atrophied. The patient was unable to extend his wrist, fingers or thumb, and sensation was less acute. The faradaic current was applied for a week, but without any effect. On June 14th a vertical incision was made about four inches and a half in length in front of and parallel

[1] Sajous, vol. iii., 1892, A. 56.

to the external supra-condyloid ridge of the humerus. This was carried down to the bone over the seat of the fracture. The radial nerve, which was given off abnormally high, was first exposed. On following this upwards the main trunk of the musculo-spiral was discovered adhering firmly to the bone, covered by the periosteum but free from entanglement in the callus. The nerve was freed from its attachment, the divided muscles sutured and replaced beneath the nerve, which now took a new course in a muscular bed. The superficial structures were sutured and the wound dressed without drainage. A week after the operation the patient was able to extend his wrist, but could not move his fingers. On July 4th he left the hospital with power to move his fingers. He returned in about six weeks with his hand and forearm as strong as the other.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

Tuberculous Ulceration of Pharynx treated by Lactic Acid.—Left Inguinal Colotomy.—"Caisson" Work in Bladder Surgery.—Radical Cure of Hernia.—Pelvic Bony Tumour associated with Osteo-arthritis of Hip.—Leprosy improved under Treatment.—Fusiform Carotid Aneurysm.—Cystic Tumour of Auricle.—Ulceration of Ears.

A CLINICAL EVENING of this Society was held on Nov. 14th, the President, Mr. Hutchinson, in the chair.

Dr. PERCY KIDD showed a case of severe Tuberculous Ulceration of the Pharynx, which had been successfully treated by lactic acid. The patient, a woman aged forty-one, at the present time showed a large cicatrix on the back of the pharynx; there were still a few small nodules at the side of the scar and at the back of the tongue. She presented signs of pulmonary tubercle at the beginning of the year, and later the throat trouble commenced. Before treatment was begun there was diffuse ulceration of the whole of the back of the pharynx, the surface being pale and grey, dotted with bright red points like tubercles and coated with a tenacious secretion. It was intensely painful, swallowing being almost impossible. The surface was thoroughly cocainised and lactic acid was freely applied, first in a solution of 50 per cent. afterwards the pure acid being used. It was only after fourteen applications that evidence of healing was observed; then the pain soon ceased and the improvement rapidly advanced. The most favourable case for this treatment was an ulcer without thickening of the submucous tissue. If there were induration not broken down the surface should be touched with the cautery and the acid then rubbed in. Great patience and perseverance were necessary to produce good results. The ulcer had not been examined for bacilli, though they were found in the sputum. He had seen four cases cured by the lactic acid treatment, and he referred to one case of undoubted tuberculous ulceration in which a spontaneous cure took place.—The PRESIDENT related a case under his own care in which there was a large ulcer of the soft palate quite superficial, and the diagnosis lay between epithelial cancer and tubercle. It was treated by the liberal use of Paquelin's cautery on three occasions, and it healed. In another case of extensive ulceration a fatal result followed extension of the pulmonary trouble.

Mr. GOODSALL exhibited a clerk aged forty-seven on whom he operated in January last for Fissure of the Anus, and he then found a tumour growing from the sacrum and extending into the pelvis on the left side. At the end of October the abdomen began to show signs of distension, and on Nov. 10th a left inguinal colotomy was performed. Two days later the bowel was opened by a linear incision, and a month afterwards he left the hospital. He had since increased much in weight, and at the present time the characters of the tumour appeared to be unchanged.

Mr. GOODSALL likewise showed a French polisher aged seventy who had been the subject of Cancer of the Rectum. He had lost flesh for two years and had passed blood from the rectum for about three months, there being about six motions daily, accompanied by prolapse. The carcinomatous growth occupied the posterior three-fifths of the rectal wall. It began about one inch above the anus and extended upwards for three inches, being freely movable. Left inguinal colotomy was performed on June 14th, and a longitudinal incision was made into the bowel two days later. On June 28th the lower end of the rectum was removed together with the growth, a small incision being made behind the anus, a pair of blunt-pointed scissors introduced to separate the rectum from the surrounding tissues, and section of the gut being performed by a wire écraseur. The patient left the hospital thirty-six days after the removal of the growth. The site of the anus was occupied by a scar and the man had since gained in weight.

Mr. HURRY FENWICK gave a description of what he called "Caisson" work in Bladder Surgery. To remove a small growth he made a limited anterior incision into the bladder and then sunk in an open cylinder somewhat like a Fergusson's speculum; this being pressed against the floor of the bladder over the growth, the water was sucked out, and he operated under the direct influence of a powerful electric light. For these sessile growths under the old method a large incision into the bladder was required, together with a big rectal bag. With the method he demonstrated it was not only possible to remove the growth, but also to apply the cautery with exactitude. He exhibited two patients from whom he had removed sessile villous growths by this method.—Mr. SWINFORD EDWARDS had found the method answer well in a case of vesicular carcinoma; it would also be useful for attacking tuberculous and other ulcerations of the bladder.

Mr. LOCKWOOD showed a man aged forty years who had Right and Left Inguinal Herniæ, and also an Umbilical Hernia. He also suffered from genu valgum. These conditions indicated a general defect which would usually forbid operation. However, the herniæ could not be retained by the largest and most powerful trusses, and the man could not follow his employment. The right inguinal hernia was the largest and contained the cæcum, vermiform appendix and some ileum. The operation exemplified that even such large ruptures as this could be successfully treated through a small skin incision along the length of the inguinal canal, and that the wound could be closed without drainage, and would heal under a single dressing. On the right side the opening in the abdomen was very large and direct, and therefore it took a much longer operation for its closure, and it would probably be less secure than the left side. Here the hernia was smaller and the conditions more favourable. A smaller wound was required, and it also got well under one dressing. Another point exemplified was the occurrence of orchitis when the conditions were unfavourable. The spermatic veins were adherent on the right side, and had to be stripped off, causing subsequent phlebitis, followed by some orchitis and acute hydrocele. On the left side there were no adhesions and no ill results followed. The operations had both caused a great thickening of the abdominal wall in the hernial regions, where many silk sutures had been inserted; but, nevertheless, it would probably be wise to give the patient a light truss as his herniæ were acquired and associated probably with prolapse of the mesentery and other organs.—Mr. SHEILD inquired as to the suture employed. He had had difficulty with buried sutures, small abscesses being sometimes formed with extrusion of the ligature knot.—Mr. S. EDWARDS advocated the high incision on account of the easier separation of the constituents of the cord that was then possible.—Mr. LOCKWOOD, in reply, said that he used properly prepared silk for his buried sutures.

Mr. G. R. TURNER showed a man aged thirty-eight who was admitted to the Seamen's Hospital in April last with Eversion and Shortening of the Right Limb. There was no history of an accident, and the joint moved freely and painlessly. It had been progressing slowly for six months. He had removed a bony swelling as big as a Tangerine orange in connexion with the ascending ramus of the ischium, and he found another bony tumour lying loose in the cellular tissue. The shortening of the limb had rapidly increased, accompanied by some difficulty of movement. The limb regained its proper length on application of extension, and the shortening therefore appeared to be due to absorption of the head of the bone. He regarded the case as one of Charcot's disease. There was loss of patellar reflex, the gait was unsteady, but there were no gastric symptoms and no numbness. There was no history of syphilis.—Mr. ALLINGHAM referred to a similar case of bony growth associated with hip-joint trouble in which the only symptom of tabes was the Argyll-Robertson pupil, but the patient later developed typical locomotor ataxy.—Mr. WALSHAM con-

sidered these bony growths unconnected with the joint not uncommon.

Dr. ABRAHAM re-exhibited a lad whom he had shown last year suffering from Leprosy, which had improved under treatment. The diagnosis had been confirmed on his arrival from Demerara, and since then there had been a marked retrogression in the manifestations of the disease. He had had chaulmoogra oil, plasters of chrysarobic acid had been applied locally, and at present he was taking cod-liver oil together with sixteen grains daily of gynocardate of magnesia.—The PRESIDENT referred to several cases under his care which he had treated on a simple plan with nux vomica, small doses of arsenic, together with a plentiful nutritious diet, and all had improved. He had very little faith in the drugs used, and believed the more important factors to be the climate and the diet. All the cases he believed to be absolutely non-contagious.—Dr. HERON said that those who believed the disease to be contagious had asserted that it always spread from those who had open sores, which had never been the case with the patient under discussion. He doubted if there was at present any evidence of medical treatment being of material value in the cure of leprosy.

Dr. HERSCHELL showed a woman aged seventy with a Pulsatile Tumour of the Neck, which she had noticed for three years. He believed it to be a fusiform dilatation of the carotid, and the only symptoms attributable to it were occasional fainting fits.—The PRESIDENT remarked that these cases were not uncommon and did not usually lead to mischief.

Mr. SHEILD showed a Cystic Tumour of the Auricle in a man aged forty-four, which had existed since 1864. He believed it to be of sebaceous origin.

Mr. SHEILD likewise showed a youth aged seventeen the subject of Ulceration at the Edges of the Ears, which had come on in the summer. There were no signs of Raynaud's disease.—The PRESIDENT said he had published a series of such cases, which he called "sun blain," and which were like "chilblain lupus." The ears were often so eroded that they looked as if they had been eaten away by rats.

CLINICAL SOCIETY OF LONDON.

Sequel to a Case of Tuberculous Peritonitis.—Hyperplastic Phlebitis.—Lumbar Nephrolithotomy.—Double Empyema.

AN ordinary meeting of this Society was held on Nov. 11th, the President, Sir Dyce Duckworth, being in the chair.

Mr. LAWFORD KNAGGS (Leeds) read a paper in which he described the appearances noted at an operation for Ventral Hernia five and a half years after laparotomy had been performed for tuberculous peritonitis. The case had been recorded in the Clinical Society's Transactions (vol. xxi.), and at the first operation the intestines, mesentery and parietal peritoneum were covered with myriads of pale pink, gelatinous-looking tubercles, as large as hemp seeds, thickly and universally distributed. The patient, who had grown into a strong and healthy young woman, reappeared in October, 1891, with an irreducible omental hernia at the site of the abdominal incision. This was successfully operated upon in November. The sac and contained omentum presented nothing unusual in appearance. The omentum that prolapsed through the hernial aperture during the operation was quite healthy. The parietal peritoneum inside the ring felt quite smooth to the finger, and a coil of small intestine, which could be well seen through the opening, was glossy and looked like perfectly healthy bowel. No signs of tubercle nor any evidence of the tuberculous condition that had existed five and a half years ago were detected. These observations, though necessarily slight and imperfect, were recorded because they threw some light upon what became of peritoneal tubercles when the patient got well.—Mr. HOWARD MARSH gave some details concerning a case in which laparotomy was performed for tuberculous disease of the peritoneum. Ascites was present, and distended veins coursed over the surface. A few days after the operation the patient improved, and she was discharged cured in two months, the abdomen then being normal in appearance. He referred to the peculiar behaviour of peritoneal tuberculosis, and suggested that the subject was worthy of being specially discussed. In some cases the tuberculous nodules undoubtedly necrosed and disappeared.—Mr. BRUCE CLARKE referred to a case in which he had performed laparotomy for peritoneal tuberculosis, and the sac was irrigated, the result being complete recovery. Eighteen months later ovariotomy was performed on the same patient, and no trace of tubercle could then be discovered. In another case, in which laparotomy was urgently indicated, it was declined and the patient recovered.—Mr. LANGTON remarked that it was by no means rare to find omentum protruding into a ventral hernia; he had met with an average of about four or five cases a year. It usually presented itself in the lower part of the incision. He referred to a case in which there was protrusion of omentum and intestine through a part of the wall not opposite to the line of suture.—Dr. GLOVER mentioned the case of a boy between eight and ten years of age who presented all the appearances and symptoms of peritoneal tuberculosis. Dr. Goodhart, in consultation, confirmed the diagnosis, and he discovered what were regarded as hard masses of tubercle by rectal examination. The lad got quite well, however, without operative interference.—Dr. GOODHART said that the peculiarity in the case under discussion was that the peritoneum recovered its perfectly normal appearance. The existence of spontaneous cure of tuberculous peritonitis was undoubted from a medical point of view. He related a case which he had examined post mortem for Dr. Habershon of a lady who some years before had been under the care of Dr. Stewart for tuberculous peritonitis. At the necropsy but little trace of tubercle could be found, but there were a few scattered caseating masses with numerous adhesions.—Dr. BARLOW remarked that the cases which seemed to do best were those in which a moderate amount of fluid was present. The cases with miliary deposit of tubercle in the peritoneum often recovered with or without operation. The cases not to be attacked surgically were those in which there were caseating masses in the omentum with dry peritonitis and extensive adhesions. Surgical treatment of these had been hitherto most unsuccessful.—Dr. HADDEN stated the result of a post-mortem examination in the case of a child whose abdomen had been opened two months previously and miliary tubercle observed to be present. No trace of this condition was found at the necropsy, and the glands were not enlarged or caseous.—The PRESIDENT remarked that in no part of the body did tuberculous lesions fare better than in the peritoneum, and he concurred in the opinion that those cases were the most favourable in which some ascites was present.—Mr. KNAGGS, in reply, said that bacilli had not been searched for. The object of his paper was to demonstrate the fact that disappearance of tuberculous deposit might occur and might leave the peritoneum normal in appearance.

Dr. HANDFORD described the case of a man aged thirty, with intermittent albuminuria, cardiac hypertrophy, high vascular tension, general dilatation of the superficial venules, obliterative endarteritis and phlebitis, the latter nearly occluding the saphena and other large veins. The patient was a spare dark man, showing signs of degeneration in his greyish hair and an arcus senilis in each eye. He suffered much from migraine. He had been failing for two years and lost a stone in weight. He denied having had gonorrhœa or syphilis, and there were no signs of the latter. He complained of pain in the left loin. The apex beat of the heart was heaving and the first sound was distinctly reduplicated. The radials were thickened and the tension was very high. Both internal saphena veins stood out very prominently and to the touch resembled tendons. There were no adhesions, and the veins could be rolled quite freely under the finger, but could not be flattened. In the horizontal position it was not possible to detect any flow of blood along the lower third of the main trunk on either side; but with the patient standing there appeared to be a slight movement of blood in them. A similar condition affected the external saphena veins, most of the branches of the internal saphenas, the radial, ulnar and cephalic veins. There was no history of preceding thrombosis or of œdema. Under the use of iodide of potassium and mercury the vascular tension fell to normal and the induration of the veins greatly diminished, but did not disappear, while the circulation through them became much more free. The albuminuria persisted in the intermittent form.—Dr. HADDEN mentioned the case of a man between fifty and sixty years of age who for years had been liable to recurrent attacks of inflammation, blocking the veins and arteries much as had happened in the case described by Dr. Handford. He referred to cases of obliterative arteritis reported by Mr. Gould and himself, in which there was no syphilis or renal trouble.—Dr. MORISON referred to a case in which there was a similar condition of the veins of the limbs, and in which, after suspected obliteration of the external iliac veins, a large surface collateral circulation developed. Removal of an elongated uvula for expectoration of blood was

followed by much trouble in stopping the bleeding; there was slight albuminuria and the temperature was abnormally low.—Dr. HANDFORD, in reply, said that the case was a typical example of arterio-capillary sclerosis which had extended to the larger vessels.

Mr. DAY read notes of a successful case of Lumbar Nephrolithotomy in a woman aged thirty-two, from whom a calculus weighing 1331 grains was removed. The history was that of about fifteen years' growth, with, in the later stages, pyonephrosis. The principal feature of the case was the division of the operation into two stages, in the first of which free vent was given to the pus and a large branch of the stone removed, and a fortnight afterwards the wound was extended and the kidney thoroughly cleared of stone. She made a good recovery and was in perfect health, but a sinus remained in the loin. Reference was made to several similar cases, though none of such a large size, with successful results.—Mr. HOWARD MARSH was in agreement with Mr. Day that it was best to remove the stone without removing the kidney, which might have been difficult through the lumbar incision.—Mr. DAY, in reply, said that recently, when removing a large kidney for tumour, he did so through a lumbar incision, continuing the latter forward to the linea semilunaris. The procedure was carried out without difficulty, and the patient did well.

Dr. WALTER CARR related a case of Double Empyema treated by drainage. The patient was a boy aged seven years and three-quarters, who was admitted to the Victoria Hospital for Children, Chelsea, on Jan. 1st, 1892, suffering from double empyema. The illness had commenced suddenly on Dec. 13th, 1891, with symptoms pointing to pneumonia. On admission the boy had urgent dyspnœa; respiration 72, very shallow; pulse 176, very small; temperature 102°. Dulness and distant bronchial breathing over the lower part of both lungs. Pus was found on both sides with the exploring syringe. Eight ounces and a half of pus was withdrawn from the right side by the aspirator, and as it would not escape readily from the left side, on the following morning a piece of the left eighth rib was excised by Mr. Naish, the house surgeon, under local anæsthesia induced by cocaine, and seven ounces of pus escaped. A large drainage-tube was inserted. The boy stood the operation well. After this the child's condition improved somewhat, but the temperature oscillated between 99° and 101°, the pulse and respiration both remained very high, and diarrhœa was troublesome. Four days after the first operation a portion of the right sixth rib was removed under cocaine as before, eight ounces of pus evacuated, and a large tube inserted; there was much more collapse than after the first operation. During the next three or four weeks the temperature was 98° and 103°, owing in part to the development of a double purulent otorrhœa, and partly also perhaps to the original pneumonia not having entirely subsided. However, the child slowly improved, the temperature became normal by the end of January, the diarrhœa ceased and the lungs expanded. The left tube was finally removed on March 10th, but for some weeks previously it had only drained a narrow sinus. The right lung took longer to expand, and the tube was only left out on April 5th. In March, during convalescence, the patient had a curious and unexplained attack of hæmoglobinuria, lasting about a week; the urine was very dark, gave the reaction for blood pigment, and showed a copious dark granular deposit, with about one-third albumen on boiling. Under the microscope a few red discs and granular casts were seen. No history was obtained of any similar previous attack, and there had been no exposure to chill. The boy was sent to Margate on April 13th, the left lung being completely expanded, and the right also, except a small portion at the base. The heart was not displaced. Eventually both lungs expanded completely, and the boy got perfectly well in every respect. Reference was made to other recorded cases, and especially to a paper on a similar case read by Dr. Sidney Coupland and Mr. Pearce Gould before the Society in December, 1890. The present case entirely confirmed the conclusions at which they had arrived, particularly as to the advisability and safety of treating these cases by free drainage, provided that if possible an interval of a few days were given between the operations on the two sides, in order to avoid the danger of excessive shock.—Mr. L. DUNN said that some years since he operated on a case of double empyema with seven days' interval with a successful result, and he referred to a similarly fortunate case in the practice of a friend.

PATHOLOGICAL SOCIETY OF LONDON.

Special General Meeting.—Epitheliomata on the Legs of a Fowl.—Genito-urinary Organs of a Pseudo-hermaphrodite.

A SPECIAL GENERAL MEETING of this Society was held on Nov. 15th, Mr. H. T. Butlin, Vice-President, in the chair.—The meeting proceeded to the consideration of certain alterations in the laws of the Society proposed by the Council. After much discussion it was agreed that such members as resided within ten miles of Charing-cross should be considered as resident members, that every person elected a non-resident member should pay a life subscription of three guineas, and that the scale of composition fees for resident members should be readjusted.

Mr. J. JACKSON CLARKE showed the Feet of a Fowl with numerous ulcerated tumours of epithelial origin. The structure of the growths was difficult to make out on account of imperfect preservation, but it strengthened the suspicion awakened by the naked-eye appearances that the condition was allied to that described by Darier in man as general follicular psorospermosis.

Mr. J. JACKSON CLARKE showed for Mr. Herbert Page the Genito-urinary Organs of a female pseudo-hermaphrodite who died aged seven. There was a perforate penis, besides a blind recess at the normal site of the female urethra. The bladder had on each side a large sacculus into which the ureter opened. Mr. Clarke considered that the specimen showed that the greater part of the female urethra was formed from a part of the urogenital sinus which was not utilised in the formation of the male urethra.

The following card specimens were shown:—

Dr. E. C. PERRY: Colloid Carcinoma of Stomach.

Dr. H. D. ROLLESTON: (1) Epithelioma of Pharynx; secondary growths in bone. (2) Osteo-arthritis of Joint between First and Second Pieces of Sternum.

Recent Specimens:—

Dr. H. P. Hawkins: Fat Necrosis from a case of Peritonitis.

Dr. A. F. VOELCKER: Malignant Tumour of Jejunum.

OBSTETRICAL SOCIETY OF LONDON.

Adjourned Discussion on Abdominal Section in Pelvic Peritonitis.

THE adjourned discussion on Dr. Cullingworth's paper took place on the 2nd inst., Dr. J. Watt Black, President, in the chair.

Dr. GERVIS began by expressing the opinion that if the title of the paper were carefully considered the objections to it stated by some of the speakers at the last meeting would be much lessened, for operative measures were not proposed in all cases of pelvic peritonitis, but only in certain cases, and these would appear from the third of the series of propositions Dr. Cullingworth had drafted to be cases of recurrent peritonitis associated with "distinct swellings in the posterior quarter of the pelvis," and with this proposition he (Dr. Gervis) could not hesitate to agree. It was true that many of these cases were not fatal, but in many there was more than one element of risk, and in all there was much positive suffering and more or less permanent invalidism and disablement, for the relief of which ordinary medical measures were of little avail. On the general question of abdominal section in cases of hæmatocele, he thought it was rarely called for apart from the occurrence of suppuration. He was disposed to agree with Dr. Williams' remark with reference to operation in cases of salpingitis associated with tubercle. As to some of the occasional sequelæ of the operation, he thought that they were hardly of sufficient importance to outweigh the great gain attained by the procedure in question.

Mr. MAYO ROBSON (Leeds) preferred to discuss the subject of the paper as a general surgeon on general principles, feeling sure that it was seldom necessary to depart widely from such in treating these cases of localized peritonitis. If we have an abscess in the neighbourhood of the cæcum we do not hesitate to open and drain it, lest it burst into the general peritoneal cavity, and why should there be any argument as to the propriety of dealing with a pelvic abscess on similar principles? If a patient suffer from recurrent attacks of perityphlitis, so-called, and the disease depend on recur-

ring inflammation of the appendix vermiformis, we do not hesitate to remove the appendix. Some months ago he saw a young patient suffering from frequently recurring attacks of pain over the pylorus, associated with emaciation and not yielding to medical treatment; he diagnosed adhesions over the pylorus following gastric ulcer, opened the abdomen, separated the adhesions, and the patient is now robust and well. Why should it be thought unwise in recurrent pelvic peritonitis to separate adhesions as a rule far more extensive than in the case named? Where life is endangered surely no one can dispute that an operation which gives a good chance of cure and which need have a mortality of not more than 5 to 7 per cent. is unwise. He would prefer not to operate in cases of hæmatocele unless suppuration were indicated. He handed round a printed record of all his hospital and private cases (sixty-five in number), giving details as far as possible on Dr. Cullingworth's lines. There were two deaths referrable to the operation (3 per cent.). He had several times opened and drained pelvic abscesses through the peritoneum, but he agreed with Dr. Cullingworth that such a procedure is not so satisfactory as removing the abscess sac, which is frequently a dilated tube. He disagreed with those speakers who argued that such abscesses were best treated from the vagina. He agreed with all Dr. Cullingworth's conclusions in the main, although probably differing in the details. He disagreed with those who argue that this class of cases very seldom ends fatally if left to nature, as he had known a number do so. Healthy organs were never removed, and if the disease was limited to one side the other appendage was not removed. He now never removed the ovaries for the cure of nervous symptoms.

Mr. KNOWSLEY THORNTON said he had studied Dr. Cullingworth's paper and tables carefully, with the result that he was deterred from sanctioning or performing these operations. First, there was the terrible mortality of 18 per cent., a mortality which could not in any way be justified by the mortality of the diseases themselves when left alone. There was the extraordinary fact that nearly half the cases were incomplete. Six had sinuses and four herniæ. The latter, in spite of what Dr. Gervis had said, were very real miseries, and often far greater sources of weakness and pain than the diseases which the operations were undertaken to cure. He had taken the trouble to go over his own case-books, and from that he had in the whole of his practice, extending over nearly twenty years, operated eighty-seven times in this class of case with six deaths (about 7 per cent.), and it must be remembered that all his early work was done in times far different from the present. In the whole series he had only three incomplete cases, and his mortality would have been only half what it was if he had not resolutely completed three other cases, recognising the fact that these operations, if only partial, would be far better for the patient's sake if they had never been attempted. He believed that if only urgent and proper cases were operated upon the mortality would never fall much below 6 per cent. Were the diseases for which the operations were undertaken as fatal even as this? He doubted it. He had never seen a fatal case himself. Dr. J. Williams had seen two. Surely this was not much for their united experience. Then, again, how few fatal cases were ever published? He would also greatly discount recurrent peritonitis; much was called local peritonitis which had no claim to be so named. He doubted the wisdom or justifiability of surgical interference in hæmatocele unless it had suppurated, and he thought many collections of pus in the pelvis were much better opened per vaginam, where drainage was not against gravity. He criticised Dr. Cullingworth's concluding propositions, and asked on what grounds he said that salpingitis was a painless affection. The double or complete operation he was inclined to think more satisfactory in the long run in most cases. He did not wish to pose as the opponent of all operative interference in these cases. Some operations were, however, failures in point of cure; others, and the majority, were, however, very successful. He would not, however, like it to go forth from the Obstetrical Society that Dr. Cullingworth's propositions were commended by all.

Mr. JOHN W. TAYLOR (Birmingham) heartily agreed with the general tenour of every one of Dr. Cullingworth's propositions. Whether the classification of the cases on which they are founded was a wise one or not, he was glad to recognise that all the cases under discussion were unmistakably inflammatory, and all resulted in decided peritonitis. There was no question in this controversy of the removal of cirrhotic or cystic ovaries, and the discussion was at lea narrowed down to the question of removal when distinct peritonitic symptoms were or had been present; and on this question he was largely in agreement with Dr. Cullingworth. The only fault he had to find (if he might presume to say so) was that the propositions dealt with too wide a subject. In his own experience he found that gonorrhœal inflammatory diseases of the appendages is a special disease due to a specific contagion, possessing many features in common with the inflammatory affections of the appendages, but quite distinct from them in its course and results. Virginity by no means precludes the possibility of this disease. Not a few of the cases of purulent vulvitis and vaginitis met with in early childhood are found to be due to accidental infection; and such cases may result in typical gonorrhœal pyo-salpinx years afterwards, when the primary disease has been lost sight of. If the disease then be a distinct and special one, equally distinct and definite should be the rules governing its treatment. It is to this disease (because it is a contagious one and the uterus as a centre of contagion is always left behind) that the advice of complete removal of the appendages on both sides specially applies. If operation be required at all in this disease it needs to be thorough. All inflammatory affections of the appendages are not gonorrhœal. The naked eye characters may be almost identical. There may be extensive adhesions, abscess of ovary, or a limited purulent peritonitis around the appendages. Then he believed the nature of the case was, and its treatment should be, radically different. Here, if the inflammatory affection were limited to one side of the pelvis, there would be no need to remove the appendages of the opposite side. His own practice on diagnosing a case of acute or subacute tubal disease, unless there be special urgency, is to send the patient to bed for a fortnight or a month, giving bromides. If at the end of this time there be no improvement an operation is usually necessary. The circumstances of the patient are sometimes of first importance.

Dr. HEYWOOD SMITH said Mr. Thornton had referred to ventral hernia as of frequent occurrence and grave import, but such an accident did not often happen and was not to be weighed against the chronic invalidism and pain that the operation was intended to obviate; and as to calling it an operation of "expediency," it was in most cases an operation of necessity. He entirely agreed with Dr. Cullingworth's sixth proposition that "it is safer to attack cases of pelvic suppuration from above than from below." Some of those who had attended the Congress at Brussels had seen M. Segond do Pean's operation on a case of ovarian abscess. He first of all removed the uterus morcellement and then proceeded to puncture the abscess—a method they had considered wholly unjustifiable. M. Segond contended that the removal of the uterus caused the uterine appendages to dwindle; but they would require a large number of necropsies, after a long interval of time, before they would be in a position to prove such a statement. Then, again, with regard to Dr. Champneys' statement as to drainage per vaginam being more favourable owing to gravity, they must remember that when a woman was lying supine the drainage-tube was not wholly in a position downwards. Mr. Thornton had said that few patients died in these cases if left alone. He would like to know on what grounds Mr. Thornton made that most extraordinary statement.

Dr. GRIFFITH wished to draw attention to the frequency with which some speakers referred to "gonorrhœal" salpingitis, as if this were a cause easily ascertained, his experience being that it was neither easy nor common to obtain satisfactory evidence of the gonorrhœal origin of pelvic inflammations, and that these most frequently occurred after abortion, labour, and various methods of intra-uterine treatment, especially after the use of intra-uterine pessaries and tents, in all of which the probable cause was a septic one.

Mr. SKENE KEITH drew attention to the length of time which often elapsed before recovery was complete after these operations. Patients were frequently under the impression that after operation they would be well in a few weeks. If, however, they were made to understand that it might be months before their return to health would be perfect, they would be more willing to try in the first place what rest would do. At the end of six months comparatively few of these operation cases were quite well, while at the end of two years the results would be found to be very satisfactory.

Dr. CULLINGWORTH, in reply, said the object of the paper was to show that, underlying many cases of pelvic peritonitis, there was definite disease which could only be

properly dealt with by surgical means. The words "certain cases" in the title were intended to limit the discussion to those cases in which there was a definite swelling in one or both sides of the pelvis. It was in those only that he advocated and practised abdominal section. It was one of the surprises that a series of cases like this brought out, that the source of the inflammation in many cases of recurrent pelvic peritonitis is suppuration of an unsuspected ovarian cyst. Such cases have hitherto been diagnosed and classified under the vague heading of pelvic abscess. Amongst the fifty cases tabulated there were no fewer than nineteen in which new growths were present. Of course, as experience was gained one could often predict, with an approach to certainty, that in the midst of a given pelvic swelling, such and such a definite mass of disease would be found. He would refer any of the Fellows who were interested in this question to a series of six cases of abdominal section for peritonitis due to suppuration of previously unsuspected cysts of the ovary, which happened to be all under treatment at the same time, and which had been reported in THE LANCET for the first two weeks of the current year. There would be found in that series two remarkable cases in which the patient was suddenly seized with symptoms of acute pelvic peritonitis. It was determined to open the abdomen in order to avert, if possible, a fatal termination, which otherwise seemed inevitable. Neither of the patients knew anything of any tumour, yet on opening the abdomen each was found to have not one, but two, large suppurating ovarian cysts. In connexion with the question of mortality it should be stated that of the fifty patients fifteen were so ill at the time of operation that it was evident to all who saw them that a fatal issue was rapidly approaching. Of these fifteen four died; of the other five patients who died four were totally incapacitated for work of any kind, and the fifth, though able to do light work occasionally, was laid aside by an attack of pelvic inflammation every few days. It was not the case that his later and more successful operations were undertaken for less serious conditions, or were in any degree less complicated or less difficult than his earlier ones. Dr. Williams had referred to a paper by Schmalfuss as containing the only reliable account with which he was acquainted of the proportion of cases in which pain persisted after these operations. He held in his hand a copy of Schmalfuss's paper. The title of it was "Castration for Neuroses." The object of Hegar's operations there recorded had nothing in common with the object of the operations as described in the paper. When an operation was undertaken for the relief of pain, irrespective of any obvious lesion, the operator must be prepared for disappointment. On the other hand, where there was obvious disease extirpation of the source of inflammation invariably cured the patient, provided she survived the operation. The occurrence of a little subsequent pain does not constitute a failure. Dr. Williams had noted that two cases required a second operation. In both cases the fault lay not with the operation, but with the operator. The cases which Mr. Doran held up as the few examples on the list of really good surgery were just those of which he (Dr. Cullingworth) was not particularly proud. They were cases of simple evacuation and drainage of suppurating cavities where the source of suppuration was not removed. Mr. Doran expressed surprise that in Case 39, where there was a communication between the suppurating cyst and the rectum, separation and removal of the cyst were accomplished without the occurrence of a fæcal fistula. If Mr. Doran would refer to Case 25 he would find the same good result followed a similarly bold procedure there, and he would also note, on referring to Case 48, that a communication with the vagina gave no further trouble after the removal of the adherent cyst. The necessity of invoking the aid of gravitation in order to obtain efficient drainage was a notion that had long since been exploded. Experience had abundantly proved that the force of intra-abdominal pressure was amply sufficient to drive all the fluid out of the abdomen as fast as it accumulated, if only a means of exit were provided. Then Dr. Champneys said that a number of these cases were ordinary cases of pelvic abscess. If by that he meant abscesses in the connective tissue he was mistaken; there was no such case in the list. If he meant pelvic suppuration, of whatever kind, of course it was open to Dr. Champneys to adopt the vague name of pelvic abscess if he preferred it. Most of Dr. Playfair's criticisms were based on a classified list of the various conditions found when the abdomen was opened. When Dr. Playfair came to read the full details he would be the first to acknowledge that in almost every case there were good grounds for operating. He was glad to hear the remarks of Mr. Mayo Robson, for he had looked at the question from the point of view of a general surgeon, and had supported the contention of the paper as being in accord with ordinary surgical principles. Turning to the speech of Mr. J. W. Taylor, he was under the impression as he listened that he was telling the story of Case 14, so similar was that story to the one Mr. Taylor related.

The following specimens were shown:—Dr. Cullingworth, Pyo-salpinx; Dr. Aust Laurence, Ruptured Tubal Gestation; Dr. Leith Napier, Microscopic Double Oöphorectomy; Dr. Galabin, Dermoid Cyst.

OPHTHALMOLOGICAL SOCIETY.

Conjunctivitis set up by Flies.—Hyperplastic Subconjunctivitis.—Intra-ocular Injection of Antiseptic Solutions.—Intra-ocular Absorption of Iodoform.

AN ordinary meeting of this Society was held on Nov. 10th, Mr. Henry Power, President, in the chair.

Dr. BERRY (Edinburgh) read brief notes of two cases of Conjunctivitis set up by Flies: 1. An old man in whom severe inflammation of the conjunctiva, accompanied by extensive corneal ulceration, came on within twenty-four hours of his having been stung in the eye by a fly which had apparently risen from a dunghill. In addition to the local disease, there was marked general prostration, and the patient continued feeble for months afterwards. The whole course of the case seemed to indicate that the poison carried by the fly had produced the local inflammation and also some general poisoning. 2. A man aged twenty, in whom acute swelling of the right eyelid and conjunctiva came on two days after a fly had got into his eye. The inflammation soon became unmistakably diphtherial and led to complete destruction of the cornea and very serious general symptoms. It is not certain that the diphtherial poison was introduced by the fly, yet the rapidity with which the symptoms followed the accident was thought to be at least suggestive.

Dr. BERRY described shortly a group of cases under the title of Hyperplastic Subconjunctivitis. In three cases there was to be felt a hard swelling occupying the tissues below the conjunctival fold of the lower lid. This was in some associated with the irritation and discomfort common to chronic conjunctivitis. It seemed probable, from clinical experience, that the subconjunctival infiltration originated at a time when the conjunctiva was inflamed, and, for some reason, was not altogether absorbed afterwards. But an independent hyperplasia might arise in this more or less organised deposit, causing it to swell to a greater or less extent, and to be accompanied by symptoms of irritation. In fact, in pronounced cases, the conjunctivitis was very slight, although there might be chemosis and swelling of the preauricular glands.

Dr. BERRY also gave an account of some of the facts elicited during experiments on Intra-ocular Injection of Antiseptic Solutions in Rabbits, undertaken by his assistant, Dr. Chassaud, with the object of ascertaining the effect of different solutions injected into the vitreous. In some cases, before injecting the antiseptic, the vitreous was inoculated with fresh septic pus. The only substance injected after the inoculation which seemed capable of preventing purulent hyalitis was chlorine water. At the same time this injection was much better tolerated by the retina and vitreous than any other strong antiseptic solution. In two cases of purulent hyalitis in men chlorine water injected into the vitreous led to immediate improvement, and the eyes were saved although sight had been lost before the treatment was adopted.

Dr. BERRY likewise recorded a case of Intra-ocular Absorption of Iodoform in which, after extraction of senile cataract, he had applied iodoform freely to the wound. On examining the eye next day the anterior chamber was found to be filled to the extent of apparently two-fifths of its capacity with iodoform and the rest of the aqueous to be turbid. At some parts caked portions of iodoform could be seen plastered as it were upon the iris. The iodoform was gradually absorbed without causing any great irritation. In a fortnight no trace of it could be seen, and the result of the operation was good.

Mr. CAIGER mentioned a case seen by himself at Moorfields Hospital, which, he considered, was analogous to the cases described in Dr. Berry's first communication. The patient, a stableman, received a blow in the eye from a worm derived

from the intestine of a horse. Very marked chemosis of the conjunctiva followed, but gradually subsided. Mr. Caiger thought the condition might have been due to the introduction of some poisonous material contained in the excreta of the horse.—Mr. LAWFORD expressed the opinion that the condition described by Dr. Berry was recognised as hyperplastic conjunctivitis, and asked if he had met with it more frequently in old or young patients, or in connexion with any particular dyscrasia, and what plan of treatment he had found most suitable.—Dr. HILL GRIFFITH (Manchester) suggested trichloride of iodine as being a very suitable substance for intra-ocular injection. It readily broke up into chlorine and iodine and was said to be non-irritating.—Mr. HARTRIDGE stated that cases not infrequently occurred in which the injection of germicidal solutions into the eye was indicated. If it could be shown that such a measure might be safely adopted, many eyes which now had to be removed might be rescued.—Mr. DOYNE mentioned a case in which he had injected boric acid solution into the anterior chamber, washing out on two occasions complete casts of purulent matter. The eye gradually recovered.—Dr. BERRY, in reply, said that hyperplastic subconjunctivitis usually occurred in adults, and was very chronic. He had not found its course materially affected by treatment. Improvement in one case had followed the exhibition of salicin administered under the impression that the disease was of a rheumatic nature. With regard to intra-ocular injections, Dr. Berry thought it probable that a distinct advance in ocular therapeutics might be made. He believed that a comparison could scarcely be made between injections into the anterior chamber and into the vitreous. The anterior chamber he had himself frequently irrigated with solutions of perchloride of mercury, but with the usual opacity of the cornea as a consequence, though this was of less intensity in children than in adults.

The following card specimens were shown:—

Mr. STANFORD MORTON: Cyst of Iris.

Mr. JOHN GRIFFITH: Rupture of Sclera without marked Defect of Sight.

Mr. HARTRIDGE: (1) Multiple Ruptures of Choroid; (2) Case of Aniridia.

Mr. WORK DODD: Case of Aniridia.

OTHER METROPOLITAN MEDICAL SOCIETIES.

HARVEIAN SOCIETY OF LONDON.—A meeting of this Society was held on Oct. 20th, Dr. W. B. Cheadle, President, in the chair.—Mr. J. JACKSON CLARKE showed specimens from the St. Mary's Hospital collection illustrating Purulent Peritonitis from menstrual ovarian hæmorrhage, from puerperal septic infection, and from perforation of the vermiform appendix. The latter specimen was interesting from a curious exaggeration of the normal sacculation of the colon due to long-standing constipation. Mr. Clarke also showed specimens illustrating rupture in tubal pregnancy and remarked on the certainty with which chorionic villi could be recognised in sections and in teased clot.—Mr. LAWSON TAIT read a paper on Peritonitis. At the outset he stated that the time at his disposal would only allow of his dealing with traumatic peritonitis or that following upon operations on the abdominal cavity. With regard to the pathology of inflammation Mr. Lawson Tait confessed that he was "quite at sea." In peritonitis the germ theory was useless. The cause of death in peritonitis was the disturbance of the ebb and flow of the serum stream of the peritoneum and the disturbance of the function of the liver. As to treatment, the great thing to do was to prevent peritonitis; as a rule, one had no chance of curing it. Years ago he gave up the use of opium on the grounds that it masks the patient's condition and diminishes the vermicular action of the bowels. He had banished ice from the treatment of thirst consequent upon opening the abdomen; the best thing to use was warm water. Of late years he had even diminished the amount of fluid to the vanishing point. If sickness occurred on the third or fourth day all food, including water, was stopped for twelve hours. Should the patient be unable to pass flatus for twenty-four hours after the operation, the nurse must, on her own responsibility, proceed to administer a turpentine enema. If this did not succeed, a mild saline purgative was given. Mr. ALBAN DORAN agreed with Mr. Tait in regard to the question of keeping the patient's stomach empty for some time after operation. On the other hand, nutrient enemata should be given, except in young or very robust patients. Mr. J. JACKSON CLARKE protested against the pathological opinions Mr. Tait had expressed. Mr. Tait had said that in several conditions he had tried for the first time new operative measures. Mr. MALCOLM said that Mr. Tait had suggested an ebb and flow in the peritoneal cavity connected with the excessive secretion of bile in peritonitis. Mr. Malcolm maintained that the symptoms described occur without the existence of any peritonitis at all. He drew attention to the fact that a traumatic inflammation reaches its culminating point in about three days. Mr. Malcolm argued that it is an obstruction or a paralysis of the bowels that causes the distension and other symptoms, and that any peritonitis found after death was secondary to this complication. Dr. HEYWOOD SMITH said the profession owed a debt of gratitude to Mr. Lawson Tait for having done so much to promote the administration of purgatives in the preliminary stage of peritonitis. Dr. BOXALL would speak to one only of the many debatable points raised in Mr. Tait's interesting paper. His experience at the General Lying-in Hospital as regards scarlet fever was strictly analogous to that of Mr. Tait in operation cases. For the last thirteen years the service of the hospital had been conducted upon Listerian principles.

HUNTERIAN SOCIETY.—A meeting was held on Wednesday, Nov. 9th (clinical evening), Mr. R. G. Tatham, Vice-President, in the chair.—Dr. G. E. HERMAN showed Champelier de Ribes' Bag for Dilating the Cervix Uteri, lately invented for this purpose.—Mr. J. S. E. COTMAN brought forward a man aged about thirty-five, who had a carbuncle behind his left knee last year, and after this healed ulceration commenced and gradually spread, healing in the centre, with scolloped undermined edges. Mr. R. G. TATHAM and Mr. J. POLAND considered it syphilitic in nature.—Dr. T. MARSHALL showed a man of about forty-five years of age who had been troubled by perspiration on the right side of his face on excitement for about nine years since a severe attack of typhoid fever. Dr. HINGSTON FOX referred to cases of sweating of limited portions of the face in children of an unstable nervous disposition—e.g., of one side of the nose, and parts of one cheek and brow. He had shown a case of hyperidrosis of a limited area on one forearm in a hysterical girl. Mr. COTMAN had exhibited last year a case of sweating of one half of the face following parotid suppuration, in which he thought there had been some blending of the nerve fibres of the chorda tympani and auriculo-temporal nerves.—Dr. A. T. DAVIES exhibited a case of Graves' Disease in a woman aged forty-three years; the symptoms—palpitation, proptosis, goitre, tremor—were all well marked, and the interest lay in its long duration, twenty-three years. Mr. DENTON CARDEW had observed deaths from diabetes and from the exhausting diarrhœa which occurred in some severe cases. When cured, the thickening of the thyroid and the eye conditions were generally permanent. The pulse rate became much exaggerated on excitement.—Dr. GLOVER LYON showed a woman aged about thirty-five years, with extensive persistent hyperæmia and hypertrophy of the left shoulder and almost entire upper extremity. The skin was red, the colour disappearing on pressure, the bones and muscles enlarged (patient was not "left-handed," though this upper extremity was the stronger). The surface was warmer than on the other side, but often felt more chilly to the patient. The condition was congenital.——At a meeting on Oct. 26th, Mr. F. Gordon Brown, President, in the chair, a discussion on Phthisis in Relation to Life Assurance was introduced by a paper by Dr. GLOVER LYON, based on an inquiry by himself and Mr. Manly, the actuary of the Mutual Life Office, into the mortality experience of that office. The statistics obtained were explained in some detail and compared with the returns of mortality from phthisis by the Registrar-General, but it was admitted that the figures were not large enough to base conclusions upon. Dr. J. E. POLLOCK referred to the Brompton Hospital statistics, indicating that 38 per cent. of phthisical patients showed the taint of heredity. Parental heredity was the great element, but it went back also to grandparents. Two things modified heredity, age and physical condition, and this was the more important element. We declined a man of delicate build, shallow-chested, shabby and flabby tissued and taking no exercise. Dr. SYMES THOMPSON believed that in cases of well-defined lung disease we could make a more

certain prognosis than in small manifestations of imperfect health. Statistics of his own office had shown that minor defects, such as leanness, stoutness, plethora and corpulence, were bad in their results. Dr. W. SEDGWICK SAUNDERS said his idea of the duty of a medical examiner was to select good lives, and not to attempt to pass all lives. He quite agreed as to the preponderating importance of personal physique.

THE ISLINGTON MEDICAL SOCIETY.—At a recent meeting of this Society Mr. C. B. LOCKWOOD read a paper on the Radical Cure of Hernia, with a selection of suitable cases and the results of the operation. He said no operation ought to be called a radical cure unless it enabled the patient to dispense with a truss. By open methods of operating and asepsis this could now be done in suitable cases. Asepsis was attained by scrupulous care in the preparation of the patient and of the materials used in the operation, and also by simple and correct operating. The operations for the cure of inguinal and femoral hernia were described. It was most important to avoid interference with the scrotum, and after obliteration of the sac, the inguinal canal in one case, and the femoral canal in the other, were secured with a series of buried silk sutures. These were deeply introduced with powerful blunt-pointed needles. The operation for the cure of femoral hernia was particularly favourable, and, as there was no spermatic cord to embarrass the operator, it was easier to accomplish than that for the cure of inguinal hernia. The operation of radical cure was called for after kelotomy; it prevented immediate recurrence of the hernia, subsequent relapse of the hernia, protrusion of the sac, sloughing of the sac, and suppuration in the sac. It was also expedient in irreducible hernia of small dimensions, especially in cases of femoral epiplocele; in cases in which a truss was inefficient in schoolboys, and lastly in those who were candidates for the army, navy, or other services. For the obtaining of good results a proper selection of cases was imperative. The extremes of life were unfavourable. Amongst unfavourable conditions were those in which the hernia had been neglected, leading to the formation of huge hernial apertures. Finally, the recognition of the fact that in many cases of acquired hernia the local condition was only part of the disease was of the highest importance. There is a class of cases in which the tissues are generally deteriorated, with prolapse of the mesentery, of the colons, transverse mesocolon and kidneys. The usual routine of an operation was described. The dressing was removed on the eighth or tenth day, the patient remained recumbent three weeks, took carriage exercise for another three, and did not ride or violently exert himself until three months after the operation.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—A meeting of this Society was held on November 4th, Mr. F. Swinford Edwards, F.R.C.S., in the chair.—Mr. R. F. BENHAM showed a large Ovarian Cyst to which the vermiform appendix was adherent. In operating hæmorrhage from the appendix was so severe as to necessitate its ligature and removal.—Dr. CROMBIE exhibited the Heart from a case of Ulcerative Endocarditis, of which he read the notes. The patient was a young man and an athlete and the symptoms came on after a sprint. The temperature was never high, neither was pericardial friction audible at any time.—Dr. THUDICHUM read a paper on Gall-stones, their Origin, Nature and Treatment of the Diseases to which they give rise. The author referred to his previous researches by which he had proved that gall-stones were originally caused by a catarrh of the mucous epithelium and glands of the bile ducts. This led to the formation of casts of the ducts, and around them, after they had been shed, the gall-stone matter was deposited. During the catarrh bacteria entered the ducts from the duodenum and caused decomposition of the bile. Foreign bodies were rarely the cause of gall-stones. The difference between human bile and that derived from animals was next referred to. The statement that the bile contained lecithin was directly disproved. He next showed that the products of decomposition of ox bile and of human bile corresponded with the ingredients of their relative gall-stones. A rational medical treatment of gall-stones could only be based upon a right appreciation of the functions of the liver and bile. The steps of the operation of cholecystotomy were described, as also the method of crushing the calculi in the bladder or ducts; and where this was impossible, it was recommended to cut them out, closing the ducts by suture. In the treatment of colic he advocated the use of morphia subcutaneously, of large quantities of very dilute lemonade, and of chloroform anæsthesia when collapse threatened. The paper was illustrated by drawings and specimens and was followed by a discussion.—Dr. HENRY SUTHERLAND read a paper on the Prevention of Suicide in the Insane, a full report of which will appear in our columns. In the discussion which followed, in which the President, Dr. Alexander, Mr. Atkinson and Mr. Lloyd took part, the treatment in private of cases on the borderland of insanity, where there was a suicidal tendency, was dealt with. In his reply, Dr. Sutherland advocated the most careful and ample supervision, and where it was feasible (in non-certifiable cases) their admission as voluntary patients into asylums.

Reviews and Notices of Books.

Elements of Human Physiology. By ERNEST H. STARLING, M.D.Lond., Joint Lecturer on Physiology at Guy's Hospital. Pages 464 with 94 woodcuts. London: J. & A. Churchill. 1892.

IN a work of this kind it is not so much the fulness and completeness of the exposition given that have to be considered, but rather the clearness with which the facts are presented to the student and the judgment with which those facts are selected. It is manifest that it is impossible to compress into the compass of less than 500 small pages the whole of the facts that are given in such a work, for example, as that of Landois, but, fortunately, it is only the principles which are of real importance and which the student should really be required to know. In these respects we think Dr. Starling has done his work well, and that the student who has mastered his book in his first or second year will have acquired enough information to enable him to take up with advantage one of the larger treatises. A long and well-written section is devoted to the vascular mechanism, in which the cause and the mode of estimating blood pressure are given together with the changes occurring in the heart at each contraction. The author remarks correctly that, in the normal condition when the pericardium is intact, the apex remains almost stationary during contraction; but he goes on to say "that this is owing to the fact that the pericardium is fixed externally, and the apex could not rise without causing a vacuum between it and the pericardium." Is not the stationary position of the apex due to the combination of the rising of the apex consequent upon contraction of the muscular fibres of the ventricles being compensated by the recoil of the whole heart consequent upon the elasticity of the great vessels which react to the sudden pressure exerted by the issuing blood?

The facts relating to the nervous system seem to us remarkably well written—as, for example, the section on the Inhibitory and Accelerator Nerves of the Heart, and that on the Vaso-motor Nerves—difficult points to give well. We notice, however, that an important diagram, Fig. 49, has no explanation of the lettering, either at the foot or in the text, and though an advanced student may recognise its meaning it would be entirely beyond the understanding of the beginner for whose instruction the work is designed.

Throughout the work Dr. Starling omits all reference to histology, which indeed it is impossible to enter upon in a work of this size with the least advantage to the student; nor is it desirable when there are already two such excellent manuals in the field as those of Klein and Schäfer. Reproduction is dismissed in less than a dozen pages. In a short appendix a description is supplied of some of the instruments more commonly used in physiological research. Finally there is a good index. The work as a whole fulfils its intended purpose, and can be safely used by the student as a reliable guide.

A Short Manual of Inorganic Chemistry. By A. DUPRÉ, Ph.D., F.R.S., F.C.S., &c., and H. WILSON HAKE, Ph.D., F.C.S., F.I.C. Second Edition, Revised. London: Charles Griffin and Co. (Limited). 1892.

THE first edition of this work was favourably noticed in THE LANCET some few years back, and we are pleased to see that our opinion of its merits has been confirmed by the fact of a demand having since arisen for the issue of a second edition. We heartily agree with the line of treatment which the authors have adopted. They believe—and they have had considerable teaching experience—that general principles should precede what may be termed "descriptive chemistry." In other words, the student should be presented with the axioms of chemistry before he is brought to consider the practical portion of the science. He thus gains a sound acquaintance with theory, a knowledge of which may be acquired without any previous knowledge of chemistry whatever, which enables him to carry on his practical work more systematically and intelligently and with greater profit than before. The book is written in a clear and easy style, the facts are well arranged, and the few blemishes which we had occasion to point out in a previous notice have been effaced. In the article on Carbonic Oxide we should like to have seen some reference to the peculiar and interesting action of the gas upon nickel and iron recently described by Mond and others. All other facts, however, are in accordance with modern requirements; as examples, the preparation of fluorine and phosphorus trioxide may be cited. A feature of the work is the introduction of a short paragraph here and there to describe the physiological action of the more important elements and compounds. We know of no better text-book on the subject of inorganic chemistry than the one before us, and our hope is that the authors may at some future time be prompted to write a second volume in similar style, dealing with the organic section of the science, so that the whole range of the subject may be brought within the compass of one text-book—a want that is still felt by medical students and others.

Napheys' Modern Therapeutics. Vol. I. General Medicine and Diseases of Children. Ninth Edition, Revised and Enlarged. By ALLEN J. SMITH, M.D., and J. AUBREY DAVIS, M.D. London: Baillière, Tindall and Cox. 1892.

NAPHEYS' Therapeutics is a work of established reputation, which will be increased by the present handsome volume. The aim of the work was indicated in an earlier edition very clearly; it was intended to acquaint the reader with the exact treatment of each disease by living clinical teachers and careful practitioners of several countries. This information, as the book has grown, has been drawn from various sources: the periodical literature has been consulted, notes of clinical lectures have been referred to, and sometimes inquiries have been addressed to eminent physicians as to their most successful methods of treating various diseases, and their replies have been incorporated. Such a work needs constant revision. Space has to be found for much that is new by the removal of certain statements that have become antiquated, and hence considerable care must be expended in the process of pruning and lopping. The editors have—wisely, we think—returned to the plan of having only two volumes in place of four, reserving the first (which is before us) for General Medicine and Diseases of Children, while the second will comprise General Surgical Therapeutics and Gynæcology. In the section upon General Medicine the physiological systems form the basis of arrangement, a separate chapter being devoted to Toxic Diseases. Very rarely a few brief clinical features are mentioned when they have an important bearing upon the etiology and treatment; as a rule, the excerpts comprise only an account of the treatment adopted and the method of its employment, each author being given full credit and responsibility for his statements, and each subject being presented from many, even conflicting, points of view. The advantage of this is obvious. The work is one which may be consulted frequently and from which many valuable and suggestive hints may be obtained. For the busy practitioner the frequent introduction of formulæ will be found attractive, but, as the writers are culled from all parts, it may be well to bear in mind that many prescriptions are of American origin. Congratulations are due to the editors for the industry which has left but few recent statements of importance unnoticed, and to the publishers for the very attractive and serviceable way in which the volume has been produced.

Temperament, Disease and Health. By FRENCH ENSOR CHADWICK, Commander, U.S.N. New York and London: G. P. Putnam's Sons. 1892.

IN a little volume of eighty-five pages of rather large type, with an amplitude of margin that would delight Mr. Ruskin, Commander Chadwick essays the solution of the difficult and obscure problems arising out of the bearing of temperament and diathesis upon health and disease. He aims especially at putting forward two ideas—(1) that there is associated with temperament a specific rate of change (tissue change is apparently meant); (2) that the failure to keep up that rate—or, in other words, a failure of elimination to keep pace with accession of material—is the primal cause of organic disease. This may be true regarding such diseases as Bright's disease or rheumatism, but what has defective elimination to do with, say, bronchitis or meningitis, or tuberculosis or cancer? Vague generalisations are the greatest of snares. The author inclines to the view attributed to Dr. Paul Gibier, that there are three temperaments—viz., the alkaline, the acid and the neutral. Capacity for going a long time without food and of sleeping at will is, we are informed, "always associated with gray eyes or gray eyes shot with brown." We do not know what are Commander Chadwick's scientific or medical qualifications for dealing with some of the most difficult questions to which the human mind can address itself, but, with all respect, we feel it difficult to take his book seriously. *Ne sutor*——; the proverb if old is generally applicable.

OUR LIBRARY TABLE.

The Art of Feeding the Invalid. A Series of Chapters on the Nature of certain Prevalent Diseases and Maladies, together with carefully selected Recipes for the Preparation of Food for Invalids. By a MEDICAL PRACTITIONER and a LADY PROFESSOR OF COOKERY. London: The Scientific Press, Limited. 1892. — Every practitioner is aware of the essential importance of a suitable and carefully selected dietary in certain cases of disease and of its importance in most of them, as well as of the difficulty of the task of adjusting the diet, in point of variety particularly, from day to day to the fastidious tastes and requirements of invalids in all cases. Miss Nightingale was quite right when she said that a number of sick people are annually starved in the midst of plenty from want of attention to the ways which alone make it possible for them to take food. There is no doubt, too, that patients in private houses fare worse in this respect than patients in hospitals on account of the greater knowledge and experience as well as supervision which are exercised in the latter—in cases of serious disease especially. This book deals with certain prevalent diseases in different chapters, lays down general statements as to their several natures and the principles to be followed in providing a daily diet, and refers to a series of recipes, so that a patient can be provided throughout his illness and convalescence with a system of diet suited to his condition. It points out "what to eat, drink and avoid," a main object of the authors being to secure for the invalid

as great a variety of well-prepared food as possible. Its design is consequently excellent, and we think it has been successfully carried out, containing, as the work does, information not hitherto published in such a form. It is scarcely necessary to remark on the usefulness of information of this kind to matrons of institutions, sisters and nurses and heads of households, and to all concerned with the care of sick and delicate people.

Golden Rules of Surgical Practice for the Use of Dressers. By E. HURRY FENWICK, F.R.C.S. Eng., Surgeon to and Lecturer on Clinical Surgery at the London Hospital &c. Third Edition. Bristol: John Wright and Co. London: Simpkin, Marshall and Co. 1892.—The usefulness of this little book, originally designed for hospital dressers, is not likely to be confined to them. It is sound, short and serviceable; and these merits seem to have been recognised, for this is the third edition of "Golden Rules." It is a good shilling's worth.

Elementary Physiography, being a Description of the Laws and Wonders of Nature. By RICHARD A. GREGORY, Honours Medalist in Physiography, author of "Physical and Astronomical Geography" &c., Fellow of the Royal Astronomical Society &c. London: Joseph Hughes and Co. 1892.—We have been much pleased with this book, which is largely illustrated, many of the illustrations being original. The information is well put together and lucidly rendered, and we have no hesitation in recommending it as a very good one of its kind.

Dental Anatomy and Physiology. By JAMES F. RYMER, M.R.C.S., L.D.S. Eng. London: C. Ash and Sons. 1892.—This little work belongs to that numerous class of note-books designed for students preparing for examinations, and whatever their real value there must be a demand for them, as so many, as in this case, reach a second edition. It is practically a digest of Tomes' Manual in Dental Anatomy and very little matter from other sources is added. It would doubtless have been of greater use had it been fuller, and this defect the author himself has probably felt since he has interleaved it so that the student may add his own notes. We think it a mistake to have omitted a description of the development of the jaws, which would have added only a few pages to this small note-book.

"The Best Thing to do": First Aid in Simple Ailments and Accidents. By C. T. S. THOMPSON. London: Record Press.—This little work, which will no doubt prove of some service to tourists and travellers, is by no means intended to supersede medical advice when available. The first part comprises eight chapters of valuable information as to the best health resorts both at home and abroad, with suggestions to those about to undertake a sea voyage. The second part is devoted to the treatment of accidents, and gives a fairly selected list of simple remedies useful in emergencies. The last chapter consists of a register of British medical practitioners resident abroad, followed by some blank pages for memoranda.

THE PÆDIATRIC CONGRESS IN NAPLES.

So important in Italy is the hygiene of childhood that it has almost risen to the rank of a State question, to be ventilated at every possible season until the Legislature makes it a feature in its internal programme. The largely attended gathering recently held at Naples is indeed but a rehearsal of a yet more influential one, to meet under the Sezione Pediatrica in the great International Congress of September, 1893. In no country in Europe is there a louder call for reform in the treatment of infancy than in Italy. The poverty of the inhabitants in such provinces as Calabria has encouraged a traffic in their children—well called by the *Opinione* a "white slavery"—in which parents sell their offspring to itinerant organ-grinders for service as "performing children" in the streets of Vienna, Berlin, Paris, London and New York. Nor is the lot of those other children whose less attractive looks or inferior precocity saves them from such a career a much more happy one. Neglect, even abandonment, at best a meagre upbringing and a premature enforcement of hard work are the portion of so many of the boys and girls of pauperised Italy, that the results, conspicuous in heavy mortality, and, among the survivors, in vice, disease and even crime, have compelled the more philanthropic of the people to interpose for the protection of the rising generation. The public press has warmly taken the matter up, and the *Tribuna*—an advanced Liberal organ of the widest circulation throughout the peninsula—has for some time organised a crusade on behalf of its little compatriots. At the Naples Congress the first paper on the *agenda* was thus entitled, "Sulla Istituzione Urgente in Italia di una Grande Società Protettrice della prima Infanzia," and the names of its conjoint authors—Professor Blasi of Rome and Professor V. Massini of Genova—attest the importance the subject has assumed even in seats of learning. In their preamble, Professor Blasi and Massini say: "Our laws as they stand to-day, our administrative machinery, our institutions afford small guarantee for the health and life of millions of children requiring tutelage and upbringing. For us who boast of our civilisation, what remains but to organise private relief, embodying all the active philanthropy of the country? Should the coöperation of every social class and calling be secured for this end, and, moreover, should the official authorities lend their support, the practical effects would be as salutary as they are loudly called for. ..... We are not dealing with pædiatry only; ours is a cause profoundly humanitarian, which the whole community is interested in promoting." The paper which followed and which will shortly appear in a permanent form, gave statistics of the most eloquent character on behalf of Italian children. In France, in Belgium and in England, out of a million of the very young, 280,000 die before their tenth year; while, in Italy, the corresponding deaths reach the terrible figure of 420,000, of whom a vast proportion might have been saved by ordinary surveillance and care. The solicitude shown by France and England for their poorer children evoked the warm praise of Professors Blasi and Massini. A series of practical suggestions followed, many of them inspired by British initiative, and requiring no further notice on our part than the observation that they seem judiciously fitted to meet the Italian problem where legal difficulties and Church jealousies intervene to hamper so much that is indicated for the surveillance and development of youth. An animated discussion ensued, in reply to which Professor Blasi vindicated his positions at length, and, by the unanimous vote of the Congress, carried the subjoined propositions: (1) To promote and popularise the principles and practice of infant hygiene; (2) to safeguard hired nursing by the domiciliation of the nurses and the superintendence of the weaned when at a distance from their own families; (3) to encourage, diffuse and improve the infantile sanitary institutes; (4) to watch and—on occasion—to assist with well-timed relief cases of infants threatened by extreme poverty in the matter of health and life; (5) to prevent such maltreatment of children as may endanger their health. These provisions will be embodied in a statute afterwards to be discussed, and—when approved—to be brought before the Government with a view to legislation. The subsequent proceedings of the Congress were of an interest much less dramatic than that of the foregoing paper, but still well worth the notice of the profession and included an able memoir by Professor De Bonis on the "Relations between Scrofula and Tuberculosis in the Diseases of Children; a vindication of "Creasote in Infantile Tuberculosis," by Dr. Guida, in which he drew largely on his clinical experience; a paper on "Hereditary Syphilis in Children," by Dr. Antonio Carini of Palermo, which elicited much divergence of opinion; and a memoir by Professor Fasano on "Scarlatinal Diphtheritis." These, with a full report of the discussions they evoked, will appear in the official "Transactions," a volume which must have considerable attractions for the profession at large.

THE Westminster Hospital Students' Dinner took place at the Criterion on Tuesday. Mr. James Black, F.R.C.S., occupied the chair. The dinner was followed by a concert.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 19, 1892.

THE work of the Medical Council is theoretically divided into two parts or kinds—the one having reference to questions of medical education and the other to questions of medical conduct. By a division equally theoretical the summer session has been assigned chiefly to the first set of questions and the autumn meeting to the consideration of the second. It has never been found possible in practice to restrict the attention of the Council at one sitting to one set of questions. At the last meeting in May the time of the Council was occupied mainly with questions of professional conduct. One question—and almost only one—bearing on medical education was discussed or, rather, raised—viz., the Preliminary Examination of the Apothecaries' Society. The Apothecaries' Society is almost the only one of the medical licensing bodies which continues to hold its own preliminary examination. The other licensing bodies have agreed to leave such examinations to the educational bodies of the country as the College of Preceptors, the universities or colleges, or, as in Scotland, to the Educational Institute of Scotland or the Scotch Education Department. But the Society is loth to abandon its preliminary examination, which, indeed, is rather popular. Popularity is perhaps not the best test of an examination. Be this as it may, the Society examines between 700 and 800 candidates a year. This, of course, is many more than the number of those who proceed to its professional examinations. According to the last minutes of the Medical Council it examined in 1891 780 candidates, of whom 631 were successful. This is a large proportion of success. The Council has been made sensitive on this subject by a reminder from the War Office that candidates for army and navy appointments are often found to be defective in general education, and by an intimation that such defects will be treated as a ground of rejection. It has not yet been shown what particular examinations, if any, are responsible for admitting into the profession those who are so defective. Meantime the Medical Council adheres to its principle that the medical examining bodies should divest themselves of all responsibility for examinations in preliminary education. It may be expected that this question between the Society and the Council will be warmly debated. It is not pretended that the Council can deprive the Society of its preliminary examination, but it can withhold its recommendation of the examination. It is certainly desirable that the preliminary education of those who propose to enter the profession should be tested more severely than ever if the profession is to hold its own, and if unfit persons are to be excluded. This subject may be expected to again occupy the attention of the Council. As to the question of medical education proper, the most important subject which is likely to engage the attention of the Council is that of the new regulations with regard to the fifth year in the medical curriculum. It is not certain that the material for a judgment in the shape of the regulations of the various bodies will be before the Council at the approaching meeting; but the subject cannot be long postponed, and is one of immense importance. The addition of a fifth year to the period of education is essentially the act of the Medical Council, and on this body devolves the responsibility of seeing that it is well used. But whatever may be the pressure of educational questions at the meeting, it is evident that the Council will have many serious matters to deal with of an ethical or professional character. It is only necessary to watch the newspapers and their reports of inquests and trials to see that questions affecting the propriety of medical conduct are being constantly referred to the Medical Council, and that unless some way can be devised of dealing primarily with such instances by the bodies from whom the inculpated practitioners hold their diplomas, more and more of the valuable time of the Council must be occupied in dealing with them. This very question, however, of the primary responsibility of the individual bodies for the good behaviour of those whom they authorise to practise is itself likely to arise in the Council. Our readers may remember that at the last meeting of the Council Sir JOHN SIMON spoke very strongly on this subject, and on the last day of the session wished to propose a motion asserting the duty of the bodies to deal with their own members, leaving to the Council only the duty of removing from the Register names representing qualifications withdrawn by the bodies which had given them. He was not allowed to do so by the Council at the last moment of the session. It is to be hoped that nothing will prevent Sir JOHN SIMON from bringing forward his motion at the meeting to be held next week. The matter is urgent, and no member of the Council can speak on it with more authority and weight than Sir JOHN SIMON, who knows, perhaps, more of the Medical Acts and of that which was in the minds of their framers than any other member of the Council, past or present. But apart from all such abstract questions it is obvious that some very difficult and grave matters will come before the Council, which it will have to dispose of with more than usual care, and it will have to consider whether its present rules and action are sufficient to check growing evils, and, we may add, growing scandals. A new question will also be brought prominently under its notice, as the readers of THE LANCET will have seen—viz., the right of medical men to enter into contracts with associations of non-medical persons for supplying medical services on low terms, the profits arising accruing mainly to the association, and taking the shape of dividends or investments. It is not for us to anticipate the discussion of this question or the judgment of the Council on it. We have said enough to show that the proceedings of the Council will be of exceptional interest to the profession and the public.

A DISCUSSION on the value of abdominal section in certain cases of pelvic peritonitis has occupied the attention of the Obstetrical Society of London at its last two meetings. No subject could be found better deserving the Society's careful consideration, for not only do cases in which there is pelvic peritonitis form a large proportion of gynæcological cases as a whole, but a large number of them come, in the first instance at least, under the care of the general practitioner. The question considered in Dr. CULLINGWORTH'S paper, on which the discussion arose, was as to whether abdominal section is or is not frequently called for in this

group of cases. Much difference of opinion was shown on this point in the course of the discussion, some taking the view that abdominal section is rarely required in these cases, while others, and among them Dr. CULLINGWORTH himself, supported the opposite opinion. We think the different opinions expressed may perhaps not be quite so irreconcilable as they at first sight appear to be. Some of the diversity may probably be accounted for by want of a more precise definition as to the kind of cases for which abdominal section was recommended. The title of the paper defined these as "Certain Cases of Pelvic Peritonitis." Now, while pelvic peritonitis, as in many typical cases following labour, may be *the* disease present, it may also exist as a secondary and relatively unimportant factor in various conditions; for example, it is a common complication in cases of extra-uterine pregnancy, ovarian tumours, dilated Fallopian tubes, fibroid tumours of the uterus, cancer of the uterus, and pelvic cellulitis. All agree as to the propriety of abdominal section in cases of ovarian tumour; and probably, on the other hand, in the case of fibroid tumours of the uterus, Dr. CULLINGWORTH would himself agree that the operation is rarely necessary. Yet in both instances there is often pelvic peritonitis present as a complication, and in that sense they would be included under the comprehensive title "Certain Cases of Pelvic Peritonitis." We may probably, however, assume that the opinions expressed for and against abdominal section refer more particularly to the question of operation for what is known as "chronic inflammation of the uterine appendages." By this we understand a condition of things where the fimbriated end of the Fallopian tube is closed by adhesive peritonitis, the tube being usually thickened and often dilated to a various extent, and containing either clear fluid, pus, or blood, thus constituting a hydro-, pyo-, or hæmato-salpinx, as the case may be. There are usually more or less extensive adhesions between the dilated tube, the ovary, the uterus and the adjacent parts. Tubes so dilated may form tumours the size of a hen's egg, or often very much larger. The experience of those who have frequently to open the abdomen, and observations in the post-mortem room at some of our general hospitals, go to prove that the condition of the Fallopian tubes just described is a far from uncommon one. In endeavouring to come to some practical conclusion as to the propriety of abdominal section where this condition exists, we think it will be most useful to keep as closely as possible to facts, which we may frankly say appear to us to be at present too meagre to justify the adoption of any general rule comparable to that long since arrived at with regard to the treatment of cases of ovarian tumour. The facts in our possession, then, may be stated as follows: 1. Dilatation of the Fallopian tubes to a greater or less extent is a by no means rare condition. 2. Many of the patients in whom this condition exists suffer from some of the following symptoms: pain in the lower abdomen; backache; disturbances of the menstrual function, the catamenia being excessive, scanty, or attended by severe pain; dyspareunia; feverish attacks. 3. In a certain proportion of these cases the symptoms disappear and the disease passes into a state of quiescence under palliative treatment. 4. In a certain number of cases, after temporary improvement, the symptoms recur and the patients become chronic invalids. 5. The presence of a pyo-salpinx is a distinct danger to life, but we cannot at present diagnose between a hydro-salpinx and a pyo-salpinx with any certainty. A distinct history of gonorrhœa and the occurrence of feverish attacks would be to some extent in favour of pyo-salpinx. 6. While a certain number of cases are permanently relieved by removal of the diseased organs, it is well known that some are not relieved by the operation, and that some are even worse than beforehand. 7. It has been clearly established that there are some cases where anything at all approaching a complete removal of the diseased organs is utterly impossible; since, even in the post-mortem room, in some cases, it is a matter of the utmost difficulty to dissect out the dilated tubes in an anatomically complete condition without serious injury to vital organs, so intimate is the fusion of the diseased tubes with adjacent parts. 8. In the majority of cases it is possible to remove the diseased organs completely, though the operation is not rarely attended by considerable difficulty.

We think the points we have recapitulated suffice to show, at all events, that the subject is one of great difficulty and complexity, and that the time has not yet come when it is possible to formulate any general rule for the management of these cases. Each case must be judged on its own merits when the question of operation is under consideration. Careful examination under anæsthesia is of great value in giving precision to our knowledge of the exact physical condition of the pelvic organs, and so enabling us the better to judge if the diseased parts can probably be removed completely, and also to some extent of the severity, or otherwise, of the procedures necessary for the purpose. The fullest information should be given to the patient as to the probable outlook in the special circumstances of her particular case; not forgetting that while the mortality of dilated Fallopian tubes is very small, that of the operation for their removal is not insignificant, and that the more extensive the disease, the greater is the risk.

AT the present season, when the question of winter quarters is engaging the attention of many practitioners and patients, a brief survey of the subject may prove of interest and value to our readers. The classes of persons who go abroad for the winter may be enumerated as follows: Those who simply wish to avoid the cold, damp and depressing influences of the British climate from November to April; sufferers from anæmia, debility, overwork, impaired convalescence from acute disease, or surgical operations; gouty and rheumatic and renal cases; neurotic cases, including both functional and organic nervous disease; pulmonary cases, including sufferers from phthisis, bronchitis, asthma, unresolved pneumonia and chronic pleurisy. The above list might be easily enlarged, but it includes the principal classes of invalids who may be expected to benefit by a well-planned residence abroad. The needs of the different classes necessarily vary within wide limits and will be considered in the course of our observations. In the present article we shall confine ourselves to a short survey of the climatic and meteorological features of the chief sanatoria available for those who have decided to winter abroad. Before proceeding further, however, we must not ignore the fact

that within the limits of the British islands there are many winter resorts of great value in certain cases. Hastings, Ventnor, Bournemouth, Torquay, Falmouth, Ilfracombe, Queenstown and Glengariff—to name a few out of many—possess considerable merits as winter sanatoria. They have a fair degree of warmth and mildness, picturesque scenery, excellent accommodation, and are accessible. But the moment any exact comparison between these English and Irish resorts and such foreign resorts as Mentone, Madeira, Algiers, or Cairo is instituted the radical differences between the two classes of resort become apparent. Thus at the British resorts in general the invalid must expect that during winter rain will fall on at least half the total number of days, and that on a very large proportion of these days out-door exercise will be hazardous or impossible; whereas in the Riviera the rainy days average only about five or six per month in winter, while in Egypt the rainfall is only nominal and many parts are absolutely rainless. Equally striking is the contrast if we take the average number of days of cloudless sunshine—so important to many invalids—at the different resorts. Without pretending to precision regarding a question in which precision is not attainable, we may safely say that for every day of cloudless sunshine available for the invalid during winter in the British islands there are five or six days at some of the most favoured Mediterranean resorts, and nine or ten in Egypt. Again, as regards the average relative humidity of the atmosphere, there is a great contrast between the 85 to 90 per cent. of British resorts and the 70 to 73 per cent. of Mentone, or the 58 per cent. of Cairo. Without going into further details we may say that, while the resorts upon the southern and south-western shores of England and Ireland possess great advantages, which should never be forgotten, they fall far below the favourite foreign resorts in such points as amount of sunshine, proportion of fine days, and facilities for out-door exercise.

Among foreign resorts there is a wide choice. The Western Riviera, including such resorts as Hyères, Cannes, Nice, Mentone, Monaco, Bordighera and San Remo, has a dry, bright and stimulating climate, with a very high proportion of sunshine and fine days, a remarkable configuration of coast, affording much protection from the north, charming scenery and ample accommodation. Its chief drawback is its windiness, the mistral or north-west wind being especially troublesome. The differences between sun and shade temperatures are considerable, sudden changes are common, and inflammatory affections of the lungs and pleura are somewhat frequent. At the same time, this region has undoubtedly one of the most enjoyable climates in Europe. It is a region in which the prudent patient, who observes times and precautions and medical regulations, will reap the maximum of advantage, and in which carelessness, ignorance and folly are most sure of speedy punishment. The Eastern Riviera, including such resorts as Nervi, Rapallo and Spezia, has a moister and more sedative climate than the Western Riviera, its northern screen of mountains is less perfect, and it possesses fewer attractions, natural and artificial. But it suits some patients for whom Cannes, Nice and San Remo are too stimulating.

Pau, Arcachon and Biarritz form a triad of adjacent resorts which may be considered together. Compared with the Riviera, they possess a somewhat mild and moist climate, with a fair average of warmth and of sunshiny days, and are well adapted to cases where a moderately sedative influence is desired. Biarritz, by virtue of its position and exposure to winds from the Atlantic, is the least sedative of the three. These resorts are much inferior to those of the Riviera as regards the protection afforded by mountains in their vicinity.

Malaga possesses one of the best climates in Europe. The rainy days are said to number only 40 in the year, compared with 60 at Nice, 80 at Mentone, 88 at Madeira, 119 at Pau and 155 at Torquay. While the climatic advantages of Malaga are great, we may well pause before sending patients, especially pulmonary cases, to a large, busy and not too clean Spanish city. Malaga has the further drawback that it possesses very few natural attractions. Nevertheless, its remarkably fine climate must not be forgotten in any survey of European sanatoria.

Morocco and Algeria afford several notable resorts, such as Mogador, Tangier and Algiers. They possess a much larger proportion of warm days and a greater immunity from cold winds than any of the resorts on the northern shore of the Mediterranean. Still, owing to the frequency of sea breezes and the vicinity of high mountains, their climates are moister than might have been anticipated. Thus the annual rainfall at Algiers is thirty-six inches, considerably more than the average of England, and of this four-fifths or five-sixths fall during the winter season. The interior of Algeria affords several resorts on the verge of the Great Desert—such as Biskra—where the climatic conditions rival the warmth and sunshine of Egypt.

The land of the Nile possesses one of the most wonderful climates in the world. Here alone are found associated perpetual sunshine and practical rainlessness with verdure and fertility. The rainfall of Egypt varies from eight inches annually at Alexandria and one inch and a quarter at Cairo to *nil* at Luxor, where it is facetiously said to rain once in every 4000 years. With such a rainfall the number of dull and cloudy days is necessarily very small—almost perpetual sunshine may be said to prevail and a high degree of atmospheric dryness is attained. The drawbacks to such a climate as that of Egypt are the great contrast between the day and the night temperatures, owing to the intense energy of radiation, the glare of the sunlight and the plague of dust. The Egyptian climate is enjoyed to the fullest advantage during a well-planned voyage by dahabiyah up the Nile.

The high Alpine sanatoria—such as Davos, Wiesen, St. Moritz, Arosa and Maloja—present a winter climate sharply contrasting with those previously enumerated. In these latter the prevailing conditions are almost uninterrupted frost, a high average of sunshine and fine days, a high degree of the rarefaction of the air, great dryness of the atmosphere (the relative humidity being sometimes as low as 40 at Davos), a great contrast between sun, heat and shade temperature (a maximum in the sun of 150° or upwards being often associated with a temperature far below freezing point in the shade) and (at Davos) a remarkable freedom from winds and consequent stillness of the atmosphere. These meteorological conditions constitute a highly tonic and stimulating climate.

Madeira is the type of the warm, moist, equable and hence sedative climate. The latitude ensures a high degree

of winter warmth; the constant prevalence of moisture-laden sea breezes causes much atmospheric humidity. The rainfall is moderate and the average of fine days high, and there is practical immunity from fog and dust. The most notable feature of the Madeira climate is the remarkable equability of temperature, both as regards diurnal changes and seasonal range. Extremes of heat and cold are alike unknown, and the difference between in-door and out-door temperature and between that of day and night is only slightly appreciable.

We might easily extend our survey to more distant winter quarters. The South African highlands possess a dry, stimulating climate of great value in many cases, but the country is comparatively undeveloped and the comforts of life few. Australia and New Zealand present a great variety of climates, many of them possessing a high degree of salubrity. The climate of the former is in the main hot, dry and stimulating, but great differences necessarily exist. The most favoured parts for the purposes of the invalid are perhaps the highlands of New South Wales and Queensland. The climate of New Zealand is moister and cooler than that of Australia, and approximates in character to that of the more favoured parts of the British islands.

America presents many excellent winter sanatoria, such as Colorado, California and Florida. The first of these belongs to the class of dry inland climates of considerable elevation, the second to the class of dry marine climates, and the third to the class of moist marine climates.

We need hardly remind our readers that a climate is tonic and stimulating largely in proportion to its dryness, whether associated with heat or cold, and that the sedative character of a climate depends upon warmth, moisture and equability. Places possessing cold, moist climates present no advantages to the invalid, and hence are practically excluded from the list of useful sanatoria.

Annotations.

"Ne quid nimis."

COUNTY COUNCILS AND THE REPORTS OF THEIR MEDICAL OFFICERS.

IT was expected that the appointments of health officers to county councils would have some good effect on local boards, who had been somewhat negligent in sanitary matters. As yet not much has been done, the medical officers simply making a report on their analyses of the reports of the medical officers of health within their county, and also making recommendations as to the means which ought to be taken to prevent the pollution of rivers. Public bodies move slowly, so that we may yet hope that county councils will exercise a wise and wholesome influence over rural districts and their district councils (local boards) in the future. Recently the Ince Local Board have been exercised concerning a report of the medical officer to the County Council of Lancashire, which tells of their insanitary state and shortcomings. The clerk was instructed to frame a reply. Why not the medical officer of health? The chairman of the board, who is also a county alderman, is reported to have "interviewed" Mr. Sergeant before attending the board meeting. He said: "He thought it his duty before coming to that meeting to go to Preston to see the medical officer of health. He went prepared to champion the board; but how did the medical officer reply? By producing the reports from their own medical officer that made statements bearing out his own report. He gave all credit to their medical officer for expressing himself on the importance of the matter for the first time. In one of his own reports the backyard premises in the district were described as in a filthy condition, and the letter drafted by the clerk proposed to put the matter right by denying it." Now if the county medical officer is to be taken to task for pointing out the insanitary spots in his area, what about the medical officer of health for the district; is he to be muzzled? In this very district, and read at the same meeting of the board, was the medical officer's report for the month, showing that there had been 39 cases of infectious disease—viz., scarlet fever, 13; typhoid fever, 11; diphtheria, 5; membranous croup, 2; erysipelas, 5; continued fever, 1; and puerperal fever, 2. Surely it was the intention of the Legislature, when the Local Government Act was passed which enabled county councils to appoint health officers, to aid the local medical officers of health to abolish these plague spots.

THE PERILS OF ELECTRIC LIGHTING.

THE introduction of electric lighting is, thanks to the solicitude of the Legislature and the skill enlisted in the service of the Board of Trade, an industry which, its magnitude considered, has been attended hitherto with singularly little loss of life and personal injury. The inquest held on Monday last by Mr. Drew upon the body of a workman employed by the House-to-House Electric Lighting Company, who had met his death by incautiously "short-circuiting" a lighting current, disclosed no new and unsuspected danger and gave no occasion for regret except for the human frailty which led a young man to in ur needless risk by neglecting the most elementary precautions in the conduct of his work. It would seem that in this case the paradox is true that if the electric lighting current were less dangerous than it is people would handle it with greater circumspection than they do. A Ruhmkorff coil deals a smart blow if inconsiderately touched, and nobody does touch it inconsiderately, although it always, when in action, presents numerous surfaces which are highly charged with electricity. But a lighting main is apt to kill, and is therefore insulated with the greatest and most effective care. Hence accidents are rare, so rare that they cease to make an impression, and a heedless workman manipulates the mains with bare hands as if they were harmless as kittens. A pair of india-rubber gloves would make him quite safe, as he perfectly well knows, but he prefers to take the small and inconspicuous risk, and to have his hands unshackled for his work. It is matter for rejoicing that his confidence is not often misplaced, but when it is the consequences are lamentable, for a 2000-volt current is a foe that strikes in silence but seldom strikes in vain.

OFFENCES AGAINST THE APOTHECARIES ACT.

THE judgment recently delivered, after deliberation by the Court of Queen's Bench, in the action of "The Society of Apothecaries *v.* Jones," has resulted in a definition of the nature of an offence under that Act which is not very easily derived from the words of the statute itself. It is there provided that if any person shall *act or practise* as an apothecary without due registration he shall "*for every such offence*" incur the prescribed penalty. The judges have held that the offence here spoken of is not the individual act, but a continuous course of conduct, so that although, as in the present case, three several acts may be proved against the offender, these are held to constitute only one offence. This decision supported a judgment to the same effect by the county court judge before whom the action was originally tried, and we observe that counsel for the Society

applied for leave—which, however, was refused—to carry the appeal farther. That the Society should be dissatisfied with an adverse ruling upon such a very difficult point of construction is natural enough, and if the question were entirely new we should think them very well advised in prosecuting the appeal with a view to obtaining the most authoritative decision which can be had. But, in truth, the question is not so new as it appears to have been thought to be both by the parties to the cause and the judges who decided it. The self-same question arose in the year 1824—that is to say, within ten years of the passing of the Act, when the Apothecaries' Society proceeded against a defendant named Bentley (or Warburton; there is some confusion in the report as to the defendant's name) to recover several penalties under this same section in respect of several acts alleged as so many separate offences. It was then held, as in the present case, that only one penalty had been incurred, and this must therefore be taken to have been the judicially settled construction of the section for a period of nearly seventy years. This case appears, as we have said, to have escaped the notice of all parties concerned in the more recent decision, and it is therefore the more noteworthy that the court should have, unwittingly as it were, followed and confirmed at the present date its earlier decision. The coincidence affords strong presumption that the decision is sound in law, and in any case we do not doubt that when once attention has been drawn to this old and seemingly forgotten judgment the Society of Apothecaries will be well content to acquiesce in an exposition of the law which has for so long a period enjoyed unchallenged currency.

THE REMOVAL OF HUMAN REMAINS FROM THE VAULTS OF A CITY CHURCH.

ALLUSION has already been made in former numbers of THE LANCET to the proposed removal of the bodies from the vaults of St. Mary Woolnoth, Lombard-street, to some extra-mural burial-ground. A Consistory Court was held by Dr. Tristram on the 4th inst. at St. Paul's Cathedral at which certain final details were settled, while some further additional interesting historical facts were disclosed. It would appear from these that the church was partly burnt in the Great Fire of 1666, and was not rebuilt as it now stands till 1719. Between 1830 and 1832 there had been 139 adults and 23 children's bodies buried, which must all have been deposited in the vaults of the church. This was the time of year most convenient for removing the remains, and Mr. Arnold Statham, the counsel representing the parishes, expressed a hope that the church might be reopened before Christmas. Including the number of interments above mentioned, those of 1681 adults and 422 children had taken place between the years 1700 and 1832, in which latter year the vaults were closed. In consequence of the effluvia from the vaults permeating the church nearly every official of the church (as the rector, the Rev. J. M. S. Brooke, stated) had for years died either directly or indirectly from the effects of the unbearable smell in the church. Dr. Sedgwick Saunders, medical officer of health for the City of London, had reported that the state of the church was unwholesome, and it was closed on Christmas Eve last. The rector added that he had often, while conducting divine service, heard coffins fall one upon the other in the vaults! Many were lead coffins and fell ten or twelve feet! It also appeared that in 1886 the inhabitants contributed between £600 and £700 with the object of hermetically sealing the vaults, and that this, which was the second attempt to effect the same object, was abortive. A sum of £1200 had also been spent in flooring the church above the vaults under the superintendence of the surveyors to the Charity Commissioners, who had contributed the money. Complaint was now made of the hardship of spending an additional sum of £900, the sum calculated as necessary for the ground alone which would be required in the cemetery to which the remains must be conveyed. Although we sympathise with the parishioners who have been so heavily taxed for the errors of their ancestors, we must, in justice to the cemetery authorities, point out that the ground under their control was acquired and laid out for the remains of a generation subsequent to those in St. Mary's Woolnoth. Some of these, formally interred here, were removed probably in 1830, when part of the churchyard was taken for the formation of King William-street. The remains were those of 300 bodies, which were removed to St. Michael's, Crooked-lane, 558 more which were reinterred in the vaults now to be emptied, and 112 in the "cloisters," the position of which no one now knew. The estimate for the whole work required by the Order in Council was £1955, which would cover the re-interments. In granting the faculty for carrying out the work the Chancellor expressed a hope that the parish might be relieved from at least some of the expense. In conclusion it may be remarked that the attempts to seal up these vaults hermetically, though attempted and repeated at different times, not only failed, but, according to the evidence of Mr. Phillips, the vestry clerk, "had only made matters worse." The ventilating shafts in the walls of the church had been stopped up, and the architects said that they could not be re-opened without danger. This conveys a warning to all in charge of those other City churches the vaults of which contain human remains, and brings into strong contrast the advantages to all concerned of burial in the earth and in perishable coffins.

A REVISED PHARMACOPŒIA.

AT the inaugural evening meeting in Edinburgh of the Pharmaceutical Society of Great Britain, Professor Charteris, who gave the address, set himself an easy task in selecting for his subject "Suggestions for a Revised Pharmacopœia." He first gave a slight sketch of the history and objects of a Pharmacopœia, and he rendered this portion of his address very entertaining by quoting numerous extracts from a book published in 1691 by "William Salmon, professor of physick at the Blue Balcony, by the Ditch Side, nigh Holborn Bridge," and he noted the curious fact that the diseases all told amounted to fifty-five, while the remedies for these were not less than 4362. Very little reverence for the wisdom and knowledge of our forefathers was shown in the selection of passages for quotation, which, however, served sufficiently well to indicate the gradual progress made in pharmacy during the next hundred years. The evolution of the London, the Edinburgh, and the Dublin Pharmacopœias, and the replacement of these by the British Pharmacopœia, received due notice, and it was announced that it was an open secret that another edition of the last-named would be issued within the next two years. Coming then to the suggestions offered for discussion it was found that these comprised a very lengthy list of suggested deletions—too lengthy, indeed, to be dealt with here in detail. Many of the articles mentioned were classed as "relics of old times," "household remedies," and "rarely used." It is curious to find in this list some substances, such as nitrate of copper, which have only recently been admitted, and others which held an uncertain tenure of office, passing in and out of the Pharmacopœia for no very obvious reasons. On the whole it must be admitted that nearly all in the long list might be deprived of official recognition without crippling our resources, and to the immense relief and joy of the medical student of the future. Coming next to suggested additions Professor Charteris was extremely modest, only a dozen or so being indicated, and some of these were old friends, notably the green iodide of mercury, which disappeared, under protest, from the Pharmacopœia of 1885. Some of the others named were sug-

gested as candidates for admission at that date, hence it is interesting to find their claims once more pressed. The chief amendments proposed were the introduction of an official preparation of hard and soft paraffin, which might be termed paraffinum medium (not a particularly happy name), the alteration of the melting points of carbolic acid and salicylic acid (the latter obviously being intended to ensure greater purity), the raising of the official dose of extractum filicis liquidum, and an alteration in the composition of the unfortunate injectio morphinæ hypodermica, which has so often been assailed. While cordially agreeing with the desire of Professor Charteris that our pharmacopœia should be rendered "less bulky but far more reliable," it is difficult to understand his concluding hope that "it would become, as in former years, the standard authority of scientific accuracy and the pioneer of progress." It would be most curious to learn what pharmacopœia of "former years" received and deserved such unqualified approval.

OVERCROWDING ON BOARD TRAINING SHIPS.

IT would be a matter for general regret if by any fault of administration the good service done for education by means of training ships were seriously interfered with. That such is the case there is nevertheless good reason to believe. It is reported at all events that overcrowding prevails on board these vessels to a marked extent. Lord Spencer, we are pleased to learn, has been duly apprised of this fact, and is taking steps to meet the difficulty arising therefrom. His remedy, which consists in drafting the boys as rapidly as possible out of the harbour ships, is no doubt well considered. The only needful proviso is that this work be carried out with sufficient energy. In view of the great pressure occasioned by want of accommodation, however, it appears likely that some increase in the number of available training ships will also be called for. The unusually high death-rate lately reported on board these vessels is in itself a suggestive circumstance, especially when taken in connexion with the fact of overcrowding and the ordinary prevalence of infectious disorders in early life. In such a case it were true economy rather to exceed than to fall short in providing air space, for nothing is more costly than illness.

THE WORKING OF THE FOOD AND DRUGS ACT.

DESPITE the fact that the proportion of adulterated samples during the year 1891 is rather more than 12 per cent. of those examined, and that this result is admitted to be a slight retrogression from the favourable returns of the three previous years, many of the authorities to whom the practical working of the Act is entrusted, and to whom therefore the public look for protection against fraud, have exhibited an unexplained torpidity in the matter. The very existence of the Act, indeed, was absolutely ignored in one metropolitan district (St. Martin's-in-the-fields), in four administrative counties (Hereford, West Suffolk, Montgomery and Radnor), and in twenty-seven boroughs, including many of considerable population, such as Great Yarmouth, West Bromwich, Bury, Tynemouth, Devonport, Southport, and Rotherham, not a single sample having been examined during the whole year in these districts. We have repeatedly urged that the Act runs considerable chance of being reduced to a dead letter simply on account of the lethargy of the local authorities. Surely it cannot be supposed, seeing that 12 per cent. of the total number of samples analysed were adulterated, that St. Martin's-in-the-fields and the other populous districts above enumerated are entirely free from the art and practice of falsification. Only a year ago we had occasion to purchase various samples in one of the very districts mentioned, and the results of our examination gave very little support to the notion that adulteration was a thing of the past.[1] In view of these facts we insisted that the local authorities should be roused to a stronger sense of their duty, which should consist in the exercise of powers conferred upon them, and in keeping the machinery constantly moving by which the public ought to be protected from fraud, and it may even be, from dangers to health. The recent report of the Local Government Board, from which we derive our information, gives evidence of the efficient manner, as if by contrast, in which public analysts are doing their work, for it is believed that the progress of analytical science has more than kept pace with that of fraudulent sophistication. Farther on the Bluebook contains some interesting remarks (which we emphatically endorse) anent the adulteration of milk: "The proportion of added water is often considerable, but it must be remembered that an addition of even 10 per cent., which is probably less than the average, enables the dishonest milkman to keep ten cows instead of eleven." Again, we read: "There is considerable difference in the practice of analysts as regards their reports. One pronounces as adulterated all milk to which he believes water has been added, however small the proportion, while another only condemns samples in which the dilution has been so great that the case may be taken safely into court." We fully discussed in an article in last week's issue of THE LANCET the desirability of fixing a definite standard which should be adopted by every analyst. At present the Act fixes no such standard, and the analyst is bound to adopt a standard of his own based on his own experience and judgment. There are many other items of interest in the report, a digest of which appears on page 1190 of our present issue, but the main facts relating to the Food and Drugs Act are clearly of especial and grave concern to the community. Now that the Local Government Board have expressed surprise "that the local authorities in many cases are content to leave the inhabitants without that protection against fraud by the sale of adulterated food, which the exercise of the statutory powers conferred on the authority would be likely to ensure," we may surely hope the matter will at once be represented to our legislators so that strong pressure may be brought to bear upon the authorities who are concerned.

[1] Vide THE LANCET, Aug. 1st, 1891.

THE BRITISH INSTITUTE OF PREVENTIVE MEDICINE.

WE learn from a full report given in the *Oldham Standard* that at a meeting of the Oldham Medical Society, held on Nov. 11th, the claims of the British Institute of Preventive Medicine received very favourable consideration at the hands of the members of that Society. The Mayor of Oldham (Alderman Noton) was present, and Dr. Corns was in the chair. For some time past the committee entrusted with the promotion of this Institute have been gathering subscriptions, maturing their plans, and preparing their work in London, but it has been left to the Oldham Medical Society to open the campaign in the provinces. The objects aimed at by those responsible for the direction of affairs in connexion with the Institute were set forth by the chairman, Dr. Ruffer, the secretary of the Institute, Dr. Niven, Medical Officer of Health for the Borough of Oldham (who moved the resolution that the medical men of Oldham heartily approve of the establishment of this Institute of Preventive Medicine, and intend to use all means in their power to further its success, and, speaking to his resolution, maintained that it was certainly not creditable to a country like this that, although so many contributions had been so recently made to preventive medicine both by France and Germany, we had contributed so little to this great advance); Mr. Fawsitt of Oldham, Dr. Dreschfeld of Manchester, the Mayor, and Mr. Platt of Oldham, all of whom spoke strongly in favour of the scheme, and asked for the moral support of the medical men of Oldham, which would mean material assistance from many of their patients and

friends. There can be no doubt that in this matter Oldham has set an example which, with very great advantage, might be followed by many other of our large and populous centres in the provinces. With the amount of money that is asked for (£60,000) it will not be possible to do everything, but a good building may be raised, and for the performance of work within certain well-defined limits a complete apparatus and staff may be gathered together, with the aid of which much valuable work may be done; and these may be so organised that at any future time, when the enormous advantages to the profession and public have been properly appreciated, additions may be made. Nearly £50 was at once promised by the medical practitioners who were present, and there can be little doubt that other subscriptions will follow in due course. The profession in Oldham will in future be able to point to the fact that its members were the first to take up this matter outside London, but it still remains open to the medical societies of other towns to be able to say that they immediately followed so worthy an example.

THE POSTMAN'S KNOCK.

IN THE LANCET of last week we discussed the inconvenience arising in the case of sick persons and others from the frequently startling summons which announces the arrival of the daily post. We referred likewise to various palliatives which might be employed to combat this form of assault upon the nervous system. We did not, however, forget that the true cause of disturbance, the postman himself, continued to flourish in spite of the remedies proposed. Some, perhaps, would have us advise in his case, or at all events as regards his office, the radical treatment of extirpation. We confess that we cannot see our way to counsel a proceeding so formidable. The operation required would be much too great a one to be undertaken without full consultation with many other persons equally interested with ourselves. The widespread paralysis of our ordinary means of communication which it entails moreover would not in our opinion be justified by any sensible relief which might follow the operation. Speaking candidly, therefore, we can see no prospect for those who fear the postal summons but such means of palliation as have already been suggested.

THE RETIREMENT OF DR. BRIDGES.

DR. BRIDGES bade farewell to the Metropolitan Asylums Board at their last meeting, and received a warm compliment from Sir Edwin Galsworthy for the tact and ability which he had displayed in his official relations with the Board, the chairman's remarks having the cordial assent of all the members present. Very few people understand precisely where the responsibilities of the Local Government Board begin and end as regards the Metropolitan Asylums Board. Dr. Bridges' position, as representing Whitehall in connexion with the doings of the Asylums Managers, must have been a difficult one. His action has always been marked by courtesy and by a desire to support them, and the Asylums Board may well regret that he now relinquishes his official post. In his farewell address Dr. Bridges especially reviewed the history of the Board's system of small-pox isolation. This is typical of the difficulties attaching to Dr. Bridges' post. He has been understood always to have supported the Asylums Board against the view of an aerial diffusion of the infection from their hospitals, but the public view was strong in the other direction, and the small-pox patients had to be removed far away from London, under a new system which Dr. Bridges declares to have elicited the admiration of the civilised world. He frankly admits that errors may have arisen during the building up of the work of the greatest isolation authority the world has ever possessed. Errors must occur in such a work, but if they are remedied when pointed out by experience none can well complain. We heartily wish Dr. Bridges much of that cultured enjoyment in his retirement for which he is so well fitted, and as regards the Metropolitan Asylums Board we trust that the Government may find an equally intellectual, skilled and courteous medical inspector to take his place.

THE SPREAD OF SMALL-POX.

SMALL-POX continues to spread. Glasgow has some twenty-four cases; and amongst other newly infected places are Burton, Tibshelf in the Mansfield rural district, Melton, where the disease has got into the workhouse, Hipperholme, Lightcliffe, Lymm, Rushden and Enderby, near Leicester, where a case occurred in a common lodging house. At Otley considerable alarm prevails and vaccination is proceeding rapidly. A temporary hospital is also in course of erection. Isolated attacks have also been heard of from other localities. At Warrington there are signs that the epidemic has reached its maximum. Leicester has been visited by Dr. Sidney Coupland on behalf of the Royal Commission on Vaccination. The results of his enquiry are, of course, not known; but they may be taken to include an account of the failure of the much vaunted quarantine system on almost the first occasion when that scheme has been put to any semblance of a real test.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE autumnal general meeting of this Association took place at 11, Chandos-street, on Nov. 2nd, Director-General Dick, C.B., R.N. (the President), in the chair. The following resolution was passed: "That this meeting regards with satisfaction the recommendation of the Select Committee of the House of Lords to the effect that the governing bodies of the metropolitan hospitals should consider the advisability of opening their honorary staff appointments to other diplomates than those to whom they are at present restricted." On the motion of Dr. Gilbart-Smith it was decided to approach the medical staffs of the various hospitals and to urge upon them to withdraw the invidious restriction by which in many cases the diplomates of the Irish and the Scotch colleges are deprived of equal privileges with their English brethren in this respect. At the dinner which took place the same evening the chair was occupied by the President, Director-General Dick. The Association guest was Admiral Sir R. Vesey Hamilton, K.C.B., and about forty members and guests attended. A letter expressing his regret at not being able to be present was read from Sir Walter Foster, M.P., the first President of the Association.

ACCIDENTS DUE TO COVERED VANS.

A DANGER which appears to be almost inevitably associated with the use of covered vans has on more than one occasion received attention in the press. It has been once more illustrated by an accident which occurred a few days ago in Battersea Park-road and which cost a child his life. In this instance the driver in turning his horse did not notice a little boy standing near, and the latter was consequently knocked down and run over. Several persons present gave evidence exonerating the driver from all blame in the matter, the unfortunate occurrence being almost a natural consequence of the child's position at the time. We have nothing to say against the verdict given at the subsequent inquest, which agreed with their testimony. In a sense it certainly was satisfactory, though by no means reassuring. It did not quite satisfy the presiding coroner, however, and his objection to vans from which the carmen could barely see in front of them will be generally appreciated. This leads us to consider how best such accidents may be prevented. Parents can hardly be expected to keep young

children entirely off the streets, nor for that matter are children alone liable to be run over in this way. The van-cover is the real cause of offence. It cannot, we fear, be altogether dispensed with, but surely some arrangement is possible which, by rendering it more open at the sides, would allow the driver a view of at least part of the front wheels of his vehicle, and thus tend to obviate the dangers which must accompany his present ignorance of surrounding conditions.

THE HEALTH OF THE PRINCE OF WALES.

IN reference to the rumours concerning the health of His Royal Highness the Prince of Wales, we are informed on trustworthy authority that there is no foundation for them. We understand from our enquiries that His Royal Highness is in the enjoyment of his usual health.

ENTERIC FEVER IN LIVERPOOL.

CONSIDERABLE alarm is being felt in Liverpool on account of a large number of attacks of enteric fever amongst business people having their daily occupation in some of the central parts of the city. It is said that in the case of members of one cricket club no less than fifteen Liverpool men of business are down with the disease, and the cause is believed to be the highly insanitary condition of many of the older business premises.

PROMPT ATTENDANCE AT HOSPITALS.

A CORRESPONDENT of an evening contemporary complains of delay in a case of serious injury to the foot admitted to one of the general hospitals. Three hours, it is alleged, were allowed to elapse before telegraphing to the surgeon for the day. He was not at home, and two hours more are stated to have elapsed before a surgeon could be procured. A little management would easily prevent such a complaint, if, indeed, it be founded on fact, and clearly strict rules should be made and enforced to secure a prompt attendance of the surgeon for the day, and, failing him, of a substitute, who should be named.

MIDWIVES AND CERTIFICATES OF DEATHS.

THE Derby Borough Coroner had a case before him in which a midwife is said to have attended a child five days old with convulsions and congestion of the lungs, and to have discouraged the parents from sending for a medical man till the last moment, when one was sent for, but only to find the child dead. One witness stated that in the event of the child dying the midwife said, "even if it does it will be all right—I can bury it." This was denied by the midwife, who however admitted that something had been said about the case of stillborn children requiring a certificate. The coroner said a lot of that sort of thing had been going on lately in the town and he was determined to have it thoroughly gone into. The determination is a right one and comes none too soon. The coroner adjourned the inquest until November 24th.

INFRINGEMENT OF THE PHARMACY ACT.

THE county court judge of St. Helen's, when he recently imposed a penalty of £5 and costs upon a child of fourteen years of age who was proved to have infringed the Pharmacy Act by selling a bottle of oxalic acid, gave effect in the only way that was open to him to the provisions of that statute; but the case is one that brings to light a serious flaw in the Act of Parliament. The child had been left in charge of a chemist's shop during the absence of the chemist and his qualified assistant. A customer called and bought a bottle of the poison at this particular time, with which he shortly afterwards committed suicide. The child appears to have acted with great intelligence, the customer was asked for his name and warned that the acid was a poison. An adult assistant could not have prevented what subsequently happened. Still there can be no question about the impropriety of permitting children to act in matters of this kind and we should make no complaint if the penal consequences of such a dangerous irregularity had been visited upon the person in authority whose business it was to know the law and his duty to see that in his own establishment it was carried out. It is probable that the child although precocious could not pay the penalty, and we hope that it would in the end fall upon the person morally responsible for the infringement of the Act. That this child should be in the circumstances the person legally responsible is a striking and very unpleasant illustration of the fact that our English law does sometimes deal out very random justice.

PREVALENCE OF SCARLET FEVER.

SCARLET FEVER seems just now to be displaying its autumnal increase in various parts of the country in such a manner as to excite some public attention. We hear of schools being closed by sanitary authorities at the instance of their respective officers of health, as at Bedlington and Wirksworth. Scarlet fever is also reported to be prevailing in the Wandsworth workhouse and at Calverley, near Leeds. Between 2000 and 3000 cases a week are being notified throughout the country, of which the metropolis contributes more than a third. The chief other contributory places are Plymouth, Leicester, Liverpool, West Ham and Bradford.

"THE TIMES" AND QUARANTINE.

THE special correspondent of *The Times*, whose second article on English Ports and Cholera we discussed last week in reference to quarantine, now states that he is "entirely opposed to" that system. We are glad to have elicited an opinion so definite and so difficult to gather from the article itself. But since he is thus in entire agreement with us as to the opposition to quarantine we hardly understand the purport of his remark as to those "who differ" from him, a remark which might at first sight appear to apply to THE LANCET. On the important point of putting ships from infected ports at short distances on the same footing as ships actually infected, we shall be quite prepared to abide by the results of any attempt to apply such a practice to those of our south-eastern and southern ports which are in daily, rapid and incessant communication with ports of France, Belgium and Holland, for the purposes of an almost uninterrupted stream of passenger and goods traffic. But for the sake of the ports alone, we trust the experiment may never be made.

THE CORONERSHIP FOR THE WREXHAM DIVISION OF DENBIGH.

WE regret to have to announce the election of a legal coroner for the Wrexham Division of Denbigh instead of Dr. Edward Davies of Wrexham, who has been acting as deputy coroner for some months past both before and after the death of the late coroner, Mr. Thelwall. He, although a solicitor, was magnanimous enough to appoint Dr. Davies as his deputy, knowing well that he himself could not hold the office of coroner much longer and that Dr. Davies would be a candidate for the vacant office. One of the chief reasons for the election of Dr. Davies's opponent would appear to be that he had a more thorough knowledge of the Welsh language; but, as we understand that the majority of jurors and witnesses understand English and interpreters are rarely required, we fail to see how this can be urged as any reason, seeing that Dr. Davies must have had, by his long residence and extensive practice, a sufficient knowledge of Welsh to enable him to fulfil the

duties of coroner as well as he has done those of deputy coroner. Moreover, it is distinctly undesirable that a coroner should himself act in the double capacity of coroner and interpreter. A coroner makes a declaration to do his duties as coroner, not as interpreter, the latter being sworn to interpret between him and the witnesses. Dr. Davies may be congratulated on having made a good fight and on having been supported by the most influential of the County Councillors.

THE LONDON CAB HORSE.

A CONFERENCE is to be held at St. James's Hall on Monday next with the object of improving the condition of the London cab horse in respect of stabling and housing. Medical practitioners have frequent occasion to make use of the services of that willing slave the cab horse, and may be glad to assist so praiseworthy an undertaking.

MEDICAL REGISTRATION.

WE would urge on our readers the importance of taking careful note of the intimation issued, according to annual custom, by the Medical Registrar, which will be found in our advertisement columns this week. Inattention to the requirement to forward to any of the respective branch registrars a change of address, or to answer at once any letter of inquiry that may be sent in respect thereof, will subject a registered practitioner to the loss and inconvenience attending the removal of his name from the Medical Register.

DIPHTHERIA AND BOARD SCHOOLS.

WE understand there is still some difference of opinion between the Vestry of Islington and the School Board as to the prevalence of diphtheria in the Yerbury Schools and the causes of such prevalence. It is not unlikely that this difference may have to be discussed in a court of law. It would have been much more satisfactory if the medical officers of the respective authorities could have come to some mutual agreement with regard to measures for placing the schools above suspicion, which at present is certainly not their case, even if they be not the *fons et origo* of the diphtheria of the pupils.

HAIR SPLITTING.

IT is universally admitted that "hair splitting," in its metaphorical sense, is a waste of time and pains, but it may not be altogether superfluous to discuss briefly the causes and treatment, so far as is known, of the actual splitting of the hair, of the scalp and face. It is simply one of several signs which may be exhibited by hair whose nutrition is damaged by either local or general causes. Healthy hair has a gloss upon it due to its lubricating gland, a definite "set," and a remarkable elasticity, so that, if bent at ever so acute an angle, it straightens itself at once when relieved from pressure. But let any interference with its nutrition occur, whether from general constitutional conditions such as syphilis, diabetes, phthisis, fevers &c., or from local causes injuring the hair papilla, as may be seen in alopecia areata, or from the invasion of an organism, as in ringworm, or if the function of the sebaceous gland is interfered with, as in seborrhœa and many inflammatory diseases of the scalp—then some or all of the qualities which we unconsciously value in our hair are lost. It no longer preserves its natural direction or "set" and becomes difficult to keep in order, the hair shaft is dry and lustreless, becomes finer and splits and breaks in ways which vary with the individual as well as from the cause being various. In some people, the hair becomes so dry and brittle that it breaks with the ordinary manipulations of the toilet, a condition known as "fragilitas crinium"; in others the shaft is a little tougher and a green-stick fracture results, the hair not breaking quite across, but the component fibres splitting away, and an appearance is produced which has been compared to two besoms stuck together and is technically known as "trichorrhexis nodosa." Far more common than this splitting of the shaft, whether at its surface or in its substance, is "end splitting," in which the hair divides at its extremity into three or four segments, which extend from about a quarter of an inch to an inch down the shaft. This often occurs in very long hair, as in that of women on the head or in men with long, untrimmed beards, and is then explained by the hair being insufficiently nourished owing to its great distance from the roots. This at most only accounts for a moderate proportion of cases, and clipping is the obvious cure. In many cases, however, the cause is situated at the root end, where there may be folliculitis, or some one of the causes, local or general, of which examples have been given. In some persons whose hair is by no means long, especially as regards the hairy portion of the face, the splitting may extend completely down to the root and sometimes apparently starts from there, so that unless closely examined it would appear as if several hairs came from one root. Careful investigation into the cause of the defective nutrition is obviously necessary before rational treatment can be prescribed. This is sometimes easy, as when the patient has recently passed through a severe illness, trouble or anxiety, or has some discernible local affection of the skin; or it may be very difficult, such comparatively scantily nourished structures as the hair and nails even at their best, being often more subtle detectors of some departure from health than our coarser physical methods of investigation can possibly be. Still other corroborative indications of defective health may be discoverable either in the patient or his surroundings, and while these must be met according to circumstances, some help from local treatment may be afforded in many cases. Frequent clipping for long hair has been already alluded to, but does not afford much encouragement when the hair is already short. Nor can good be anticipated from the hair-dresser's usual recommendation of "singeing" after cutting, "to seal up the tubes," as he usually phrases it, thus displaying not only his ignorance of the solid structure of the hair, but also of the physical law which, even if it were a tube, would not allow fluid to escape from it. Such local remedies are calculated to be of service as will increase the blood-supply to the skin, and therefore to the insufficiently nourished papilla, shaving being one such means. We need not, however, now discuss details, but would merely point out the *rationale* of these conditions of hair-splitting and the principles of the treatment which are required to obviate them.

EXECUTION OF NEILL, THE SOUTH LONDON MURDERER.

THE execution of the poisoner Neill on the morning of Tuesday last brought with it an almost demonstrable feeling of relief to the mind of the community. His disposition appears early to have manifested a strongly criminal bias, which his after career bore out with a hideous and diabolical completeness in action. The whole history is too familiar to newspaper readers to warrant repetition in our pages. The sentence of death was passed upon him by Mr. Justice Hawkins after trial at the Central Criminal Court. In response to representations made by his solicitors to the effect that evidence tending to prove the culprit's insanity was on its way from America, a respite was granted for a week. It would appear, however, that sufficiently strong evidence to warrant any alteration in the original sentence was not forthcoming. The responsibility thrown upon the Home Secretary in this matter by the provisions of the Criminal Lunatics Act of 1884 is assuredly no light one. We are confident that the public are satisfied with Mr. Asquith's ultimate decision that there were no real grounds for interfering with the death penalty in Neill's case. There

are, no doubt, psychological points and difficulties in the case which only Neill himself could explain or give data upon which an explanation could be based. But, on the far-reaching platform where sanity stretches away into insanity, and in the analysis of human conduct in individual cases, the institutes of law and the institutes of medicine, where they are thus closely brought into relation, cannot afford and cannot dare to be too curious as to the enigmas of psychology in circumstances where the obligations of social life and the personal safety of the members of the community are under consideration.

MEASLES AND SCHOOL CLOSURE.

MEASLES is rife just now in many parts of the country, as at Motherwell in Scotland and Tipton in Staffordshire. The absentees from school at the former place number 27 per cent. of the scholars, at the latter about 50 per cent. In face of this, the question of closing the schools at Dalziel has been adjourned for a week by the Motherwell authorities; whilst at Tipton nothing has been done beyond characterising the report of the school attendance officer as "exaggerated." School authorities seem to be still slow to learn that it is the wisest plan to allow their schools to be closed in the early beginnings of an epidemic, before widespread prevalence has rendered their tardy acquiescence in closure a futile and nugatory step.

BACTERIOLOGY OF TROPICAL FEVERS.

A PAPER treating on the above subject by Dr. Domingos Freire appears in the *Gazette Médicale de Paris* of Oct. 15th. He states that clinicians have long since established the main differences between the symptoms of the so-called bilious fever and of yellow fever. The object of the paper is to show that bacteriology supports the theory which has been arrived at clinically, and that the causal agent of bilious fever is quite different from that of yellow fever. Observations were made on the blood, bile, urine &c. of living patients and on the viscera after death. Cultivations were prepared on gelatine and agar-agar. Colonies were observed to form within twenty-four hours. They first appeared as a whitish streak along the course of the needle. Large gaseous bullæ then formed on the surface of the nutrient medium. The colonies were scattered in small white patches all over the surface of the agar-agar. Successful cultures were obtained from all the organs, the urine, blood taken from the heart one hour after death, and also from the arm of a patient who had been dead for six days. Similar observations made on yellow fever gave very different results. Colonies developed in the form of a nail, the head of which was on the surface of the cultivating medium, whilst the point penetrated its substance. Gaseous bullæ never formed along the track of the needle. The part forming the head of the nail was perfectly white and was never seen surrounded by smaller colonies. Microscopic examination also revealed radical differences in the microbes of the two diseases. In the case of bilious fever a bacillus was found measuring about nine micro-millimetres in length and three in width. The bacillus was immobile, but was frequently accompanied by numerous mobile spores; it stained well with methyl violet. Each bacillus was divided into segments of different lengths; the segmentation was very rapid. Spores were found at the termination of each segment. In yellow fever, on the other hand, the microbe was a micrococcus and not a bacillus; it was circular in shape, highly refracting, and stained readily with fuchsine and methyl blue. When inoculated into animals in a virulent condition all the symptoms of yellow fever were produced. Inoculation of the bacillus of bilious fever produced in guinea-pigs a fever remittent in type. Post-mortem examinations made on the animals experimented on sh wed a considerable enlargement of the spleen, and the gall-bladder was distended with bile. In the stomach a large quantity of dark-green bile was found. The kidneys and lungs were hyperæmic, the heart was arrested in diastole and the auricles were full of dark blood. Blood taken from the heart of the animal and placed on agar-agar produced characteristic colonies. Four tubes inoculated with the bile gave positive results in three cases, the colonies and bacilli presenting the appearances already described. Microscopical examination of sections of the liver and kidney also showed the micro-organisms. In conclusion, Dr. Freire maintains that the bilious fever of hot countries and yellow fever, although closely resembling each other, are perfectly distinct diseases, and that this may be demonstrated both by the clinical features and by their bacteriological characters.

DIPHTHERIA PREVALENCE.

IT is reported that diphtheria is prevalent in the Lizard district of Cornwall, where it is ascribed to milk and connected with the consumption by cows of sewage-polluted material. This raises an interesting etiological question which should be followed up. In the meantime some 400 cases of diphtheria are being reported each week throughout England and Wales. London contributes about one-half of them; whilst Oxford, Birmingham and Cardiff are other places in which the disease has shown itself to be abnormally prevalent.

ABERDEEN UNIVERSITY CLUB DINNER.

THE biennial dinner of this London club was held on Wednesday evening at the Holborn Restaurant, under the presidency of Dr. Ferrier, F.R.S., who was supported by a large muster of the members. The guests included Sir James Sivewright, K.C.M.G., a distinguished alumnus of the University; Surgeon-General Cunningham, Dr. Lauder Brunton, and others well known in official and social circles. A pleasant evening was passed and a hearty response was given to the toast of the evening, which was proposed in an excellent speech by the chairman, who referred to the approaching completion of the fourth century since the foundation of King's College, Aberdeen, and to the great extension of the University buildings that is now attracting the attention as well as the money of all who are interested in the welfare of the "Granite City." Several Scotch songs were sung with excellent effect during the evening by Mr. Sinclair Dunn.

THE INTERNAL ADMINISTRATION OF OZONE IN THE TREATMENT OF PHTHISIS.

DR. HENRY S. NORRIS, in the *New York Medical Journal*, calls attention to the use of ozone in cases of pulmonary phthisis. The preparation of ozone he has used with successful results is called "aquozone," which is a 2½ volume per cent. solution of ozone in water, the stability of which is maintained by the presence of a certain amount of hypophosphites. The remedy was always given in the same way—viz., twelve ounces of aquozone daily in four doses, one before each meal, and the fourth at bedtime, and an ounce and a half of ozonised oil, being half an ounce after each meal. The cases in which it has proved most successful have been in persons under thirty-five years of age with catarrhal phthisis, or where the disease has not passed far into the second stage, has not been too active, and has been limited to a single lobe, or, if in both lungs, has been confined to comparatively small areas. In every case where these conditions existed the improvement has been immediate and progressive. In seven of the fifteen cases reported marked improvement took place: increase in weight, diminution and even cessation of cough and expectoration, termination of night sweats, and, finally, notable and favourable modifications of the physical signs, amounting in two cases to their entire disappearance. Of this last group all

had catarrhal phthisis. In one instance there was consolidation of a part of the upper lobe of each lung; in one case there was a cavity, and in the rest the disease was limited to one lobe. Dr. Norris remarks that if the plan outlined in his series of experiments could be carried still further—if in addition to less crowding and better food for our patients we could keep them in an atmosphere containing a certain and constant amount of ozone (the quantity to be determined by experiment),—might we not hope for better results than are now attained in ordinary hospital practice?

INFLUENZA AT GREENWICH.

INFLUENZA is said to be prevailing at Greenwich, and the health officer has reported that already one death has occurred from the disease.

ARTIFICIAL DENTURES.

THE opening meeting of the winter session of the Odontological Society, held last week, was devoted to a paper by Mr. Storer Bennett on "Some Methods of Attaching Artificial Dentures," in which he described and illustrated some most ingenious contrivances. It often happens where clasps have to be resorted to that the inclination of the natural teeth is such that the space between them which it is desired to fill up is larger at the gum surface than that on a level with the articulating surface, either from the teeth having fallen towards each other from want of support or from a natural constricted shape of their necks. In both cases where an ordinary denture is fitted with gold clasps there remains on each side of the mineral teeth a space shaped like a bisected isosceles triangle, which is a potent food trap, and, moreover, the natural teeth, by the methods generally in vogue, have to be attached high up near the cutting edges, being both conspicuous and insecure. Gold clasps have but a small degree of elasticity and are in such cases incapable of being made to grasp, when *in situ*, the most constricted part of the teeth. Mr. Storer Bennett, amongst others, has made numerous experiments with various metals which do not corrode in the mouth—for instance, steel springs nickel-plated, diverse combinations of steel and nickel, and aluminium alloys—but without satisfactory results. This led him to experiment with hinged clasps, the subject of the paper. These clasps are of two forms—first, self-adjusting, consisting of a spiral spring of 12-carat gold, contained in a tube closed at one end by a small nut and impinging at the other end of the tube upon the short end of a lever, which is the clasp itself. The other is a spring clasp known to jewellers as a brooch-joint, which requires shutting by means of the finger. Objections were raised at the meeting on the score of complexity, difficulty of cleansing, and the mechanical irritation of the tongue from the prominence of the joint; but most of these seem capable of being overcome, and the use of this method in certain cases should be of great value. Mr. Storer Bennett also showed an artificial tooth (an incisor) with a brooch-joint clasping it firmly in place, which, as the president remarked, was the first time he had heard of a hinged tooth in man.

FOREIGN UNIVERSITY INTELLIGENCE.

Freiburg (Baden).—Professor Ziegler is resigning his post as Extraordinary Professor of Zoology in the Philosophical Faculty for a Professorship of the same subject in the Carlsruhe Technological College.

Marburg.—Dr. Arthur Barth has been recognised as *privat-docent* in Surgery.

St. Petersburg (Military Medical Academy).—The second Professorship of Operative Surgery and Topographical Anatomy has been filled up by the appointment of Dr. A. I. Jakobson, Consulting Surgeon to the Duchess of Edinburgh's Hospital.

Vienna.—During Professor Kahler's illness Dr. Kraus is taking charge of his medical clinic. Professor Ludwig has been made a life member of the Austrian Upper House.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. Jacob Bischoff, Professor of Midwifery and Gynæcology in the University of Basle. Previously to his appointment in 1868 as Extraordinary Professor the instruction in gynæcology was limited to lectures. By his exertions, however, a department of the Bürger hospital containing twenty-two beds was given into his charge for a gynæcological clinic, and from this small beginning a large and important department has grown.—Dr. de Beauclair of Diez.—Dr. Grimmel of Idstein.—Dr. d'Orsonnens, Professor of Midwifery in the Laval University, or Succursale, Montreal.

THE restrictions imposed on marine traffic by the Italian Government, and embodied in the ordinances of Aug. 31st and Oct. 14th, have just been abrogated. Those that remain in force are limited to medical visitations and to disinfections of soiled articles of wearing apparel belonging to arrivals from the French, Belgian and Dutch ports; as also from the German North Sea ports, including Hamburg; from the Russian ports of the Baltic, and the Austro-Hungarian ports. The visitations and disinfections in question are to be practised in the first Italian port at which these arrivals touch.

THE annual dinner of the staff and past and present students of the Dental Hospital of London will be held on Saturday, Dec. 3rd, at the Café Royal, Regent-street, under the presidency of Sir Richard Quain, Bart., M.D., F.R.S., LL.D. Gentlemen either now or formerly connected with the hospital or medical school who may, through inadvertence, not have received special notice, and who desire to be present, are requested to communicate with the Dean at the Dental Hospital, 40, Leicester-square.

WE believe that the testimonial to be presented to Professor James Moleschott of the Roman University on the celebration of his jubilee on Dec. 16th next will take the form of a bust in bronze, to be placed among the Patres Conscripti of medical science, whose sculptured presence still animates the young aspirants to professional honours in the halls of the Sapienza.

THE Alvarenga Prize for 1892 has been awarded to Dr. R. H. L. Bibb, of Saltillo, Mexico, for his essay entitled "Observations on the Nature of Leprosy." The next award will be made on July 14th, 1893. These prizes, of $180, are awarded by the College of Physicians of Philadelphia for the best unpublished essay upon any subject in medicine.

MR. H. G. HOWSE, M.B., M.S., F.R.C.S., Lecturer on Surgery at Guy's Hospital, and Mr. A. W. Bennett, B.Sc., F.L.S., Lecturer on Botany at St. Thomas's Hospital, are announced as candidates for the vacancy on the Senate of the University of London. Both gentlemen are old-standing members of the Annual Committee.

THE Metropolitan Police Surgeons' Association will hold their annual dinner at the Criterion, Piccadilly, on Thursday, Nov. 24th, at 7 P.M. Mr. A. O. MacKellar, F.R.C.S., chief surgeon, will preside.

THE Public Health and Housing Committee of the London County Council have recommended the appointment of Dr. Charles Wheeler Forrest Young, at a salary of £500, rising to £600, a year, as an additional assistant medical officer of health.

THE application for a Royal Charter made on behalf of the Royal British Nurses' Association will be considered on Monday by a committee of the Privy Council. The counsel for the applicants are Sir Horace Davey, Q.C., and Mr. Muir Mackenzie, Q.C.

H.R.H. PRINCESS CHRISTIAN has accepted the presidency of the Norwood Centre of the St. John Ambulance Association.

ON CHOLERA, WITH REFERENCE TO THE RECENT EPIDEMIC AT HAMBURG.

BY PRIVY COUNCILLOR VON PETTENKOFER.[1]

THE outbreak of cholera in Hamburg in August naturally excited all Germany. The alarm—which the explosive occurrence of the disease in the chief commercial city of Germany, hitherto regarded as the type of a rational drainage system—spread throughout Europe and beyond it, and was not less than that of sixty years ago, when cholera first advanced into Russia from Asia. It is excusable that in 1892, as in 1831, physicians and governing bodies thought first of all how to prevent the further progress of the destroying angel—how to localise it at Hamburg.

The rigid regulations in force throughout Germany to ensure this limitation may be compared with the military cordons and other measures of detention and isolation in vogue sixty years ago. They are based on the belief that cholera is simply an infectious or contagious disease, passing from the sick and their excreta to the healthy; and that the virus can only be taken with the food, and especially in water. This is now deemed to be absolutely proved since Professor R. Koch made his interesting and scientifically valuable discovery that the evacuations of cholera invariably contain the comma bacillus. The question is now limited to determining how this bacillus acts, how it may be destroyed and how its diffusion may be prevented. The strife against the bacillus is by most now deemed to be the only real prophylaxis, to the ignoring of the great mass of epidemiological facts which are entirely opposed to the mere contagionist view of cholera. Many confine themselves to the behaviour of comma bacilli in test-tube or plate and do not trouble themselves at all about the behaviour of cholera in its epidemic extension. Many years ago I said that the etiology of cholera appeared to me as an equation with three unknown quantities—x, y, and z. Let x be a specific germ disseminated by human intercourse; y something which depends on place or time, the "local disposition"; and z the individual disposition met with in all infectious diseases, both the directly infectious, as syphilis and small-pox, and others, as typhoid fever and malaria. The contagionists have eliminated the y, finding a sufficient explanation in Koch's discovery of the x, and seeing in individual tendency or absence of immunity the factor z; so that if z be granted, cholera must occur should people introduce the bacilli into the mouth by unwashed hands, or take them into the stomach with water and food. The view is simple and easy, sufficient for him who only concerns himself with individual cases; but it does not satisfy the epidemiologist; for the latter knows that there are not only cholera-immune people, but also cholera-immune places, and that even in places where cholera has prevailed there are seasons when it will not spread, although introduced. This is what I mean by the y. It is not so easy to define as is the x, and so far one can only say that it is related to the quality and dampness of soil; but it is going too far to assert, as some do, that Koch's comma bacillus is an unimportant, if constant, concomitant.

Man alone of all living creatures is susceptible to the cholera virus, and therefore experiments on animals with comma bacilli can determine nothing. The effects on the guinea-pig—previously prepared by the administration of soda solution—of an injection of a culture of bacilli, followed by one of laudanum, or the results of the intra-peritoneal injection of fresh cultures, are of no manifest importance as against the fact, confirmed a thousand times, that epidemics of cholera are never accompanied by epizootics. Now and then it has been noted that cholera has coincided with undue fatality amongst cats or poultry, but the association has been purely accidental. Guinea-pigs did not suffer during the late outbreak at Hamburg. Similar experiments on animals with non-pathogenic fungi—e.g., the bacterium coli commune—are fatal, and the bacteria multiply in the body just like the comma bacilli. So that the only indisputable experiments on infection with comma bacilli are those made on man. The invariable presence of comma bacilli in cholera stools proves that the fungus has something to do with cholera, but it is still a question whether it alone causes the disease and solely generates the virus. According to my localistic notions it cannot do this in places which are permanently immune from cholera, nor in places which, if occasionally susceptible, are yet at that time not disposed for cholera.

Now as Munich, in the year of grace 1892, in spite of much travel of persons from Hamburg and Paris, and in spite of its October Fair, remained free from cholera, I did not scruple to experiment on myself with the comma bacillus. Of it I had received from Hamburg, through my colleague, Dr. Gaffky, a pure agar culture, and from this my junior colleagues, Drs. Pfeiffer and Eisenlohr, prepared a sufficient quantity of broth culture to be taken by the mouth. As Gruber found that fresh cultures acted on guinea-pigs more powerfully than cultures several days old, I employed a broth culture which had been in the incubator barely twenty-four hours. One cubic centimetre of this was found to contain innumerable bacilli, after being diluted a thousandfold, so that I could take at one dose milliards of bacilli, very many more than one could possibly introduce by unwashed hands. Since Koch states that comma bacilli are destroyed by the acid of the gastric juice I was careful to take them on an empty stomach—viz., two hours and a quarter after my "frühstuck"—when, according to my friend the physiologist, Carl von Voit, there would not be more than 100 cubic centimetres of gastric juice, with 0·2 per cent. of hydrochloric acid in the stomach. To neutralise this free acid the broth culture of bacilli (1 cubic centimetre) was taken in 100 cubic centimetres of water, containing 1 gramme of bicarbonate of soda. The vessel was afterwards rinsed with 50 cubic centimetres of water, so as to ensure my taking all the bacilli. I drank this cholera mixture in the presence of witnesses on Oct. 7th, it tasting like very pure water. Some were anxious about me, and begged that I would allow them to sacrifice themselves for their old teacher, but I wished to act on the old medical principle, *fiat experimentum in corpore vili*. I was right in regarding myself as a *corpus vile*. I am seventy-four years old, have had glycosuria for years, have not a single tooth in my head, and only use my artificial teeth when I have to make a speech, not needing them for mastication; and I also feel other burdens of advancing age. Even if I had deceived myself and the experiment had endangered my life, I should face death calmly, for it would not be as a thoughtless or cowardly suicide. I should die in the cause of science, like a soldier on the field of honour. Health and life, as I have often said, are very great earthly gifts, but not the highest. He who wishes to rank higher than the brute must be ready to sacrifice even life and health for great ideals. However, to me the matter did not seem quite so tragic, for I was firmly convinced my x could not kill without my y.

[Professor von Pettenkofer then gives a detailed account of his condition, *de die in diem*, as to temperature, pulse, sleep, food, intestinal symptoms &c. On the 9th he began to have diarrhœa, and did not feel very well, having some abdominal discomfort; the diarrhœa increased on the 10th and continued up to the 14th. He took no medicine to control the diarrhœa, although advised to do so, lest it should become chronic.]

The motions were examined bacteriologically by Drs. Pfeiffer and Eisenlohr to trace the fate of the comma bacilli. The first loose motion contained a large quantity, and the subsequent watery stools contained pure cultures of the bacilli. On

[1] Abstract of a paper contributed by Prof. von Pettenkofer to the Münchener Medicinische Wochenschrift, Nov. 15th, 1892.

Oct. 14th there were only a few isolated bacilli, and by the 16th these had disappeared. Bacteriologists generally admit that comma bacilli do not excite cholera by invading the body from the bowel, but that, remaining in the intestine, they give rise to the virus, which is absorbed, and then causes choleraic symptoms. Virchow more than twenty years ago pointed out the resemblance of cholera to acute arsenical poisoning. How great must have been the amount of poison formed by the many milliards of comma bacilli during their eight days' sojourn in my intestine. But I did not suffer at all from poisoning, was quite well, retained my appetite, had no trace of nausea, no fall of temperature, no albumen in the urine &c., and went about my daily avocations, so that I could not but conclude that, although comma bacilli may cause diarrhœa, they cannot cause cholera, either European or Asiatic. Possibly in Hamburg my experiment might have ended fatally, because there, on Oct. 7th, in addition to the Asiatic *x* there was plenty of the Hamburg *y* present, and it might have been that a much smaller dose would have excited severe cholera.

[When this experiment had terminated another was made in the person of Professor Emmerich, conducted on the same lines, except that he took a more restricted diet. A similar record is given of the daily condition in this case, the experiment commencing on Oct. 17th. Early next morning there was one fluid motion, and in the course of the day diarrhœa set in, so that on the 19th to 20th there were as many as fifteen to twenty colourless, watery evacuations, and an enema containing tincture of thebaica was administered and on the 20th one of tannic acid and opium. The motions became natural in the course of the 21st. Comma bacilli were found in the stools from Oct. 18th to the 28th, the motions on the 19th being almost pure cultures. On the 24th Professor Emmerich returned to his usual diet. Throughout his general condition was undisturbed, appetite retained, no pain in abdomen and only some weakness from the diarrhœa. Apart from the diarrhœa he had some hoarseness of voice and dryness of pharynx.]

These two experiments on man show that the comma bacillus does not generate the virus of Asiatic cholera, thus confirming Bouchard's results of the different effects of injections into animals of pure cultures and of the excreta (stools and urine) from cholera patients. Choleraic symptoms were not induced by the former, but only by the latter. Bouchard's experiments also show that the special cholera poison is only formed in the human organism. Perhaps one should concede that Emmerich and I did have a mild attack of cholera, as Koch and his numerous supporters would say, but I cannot admit the correctness of their view of the sufficiency of *x* and *z* to cause an epidemic, to the exclusion of *y*, no more than I can agree to the regulations enforced in Germany, Austro-Hungary and Italy, based on the discovery of the comma bacillus. Yet Dr. Baur and Dr. von Ziemssen, who have had large experience of cholera, affirm that the symptoms we exhibited were not those of which they had experience in cholera epidemics. According to the contagionist practice, on the discovery of comma bacilli in my evacuations, I ought to have been ruthlessly confined in the isolation barracks of Munich and my dwelling thoroughly disinfected. It seems a pity that this did not take place, for if it had, the contagionists would have been able to have loudly proclaimed that they had saved Munich from cholera, since Emmerich and I, by our stools, which were discharged without disinfection into the closets and drains, might otherwise have certainly infected the town. Joking apart, I too would become a contagionist, so comforting and so sparing of all further trouble is the view, if it could only be explained to me why so many places into which cholera has repeatedly entered have never had an epidemic. Lyons, which stands on the direct line of traffic between Paris and Marseilles, two infected foci, is a striking instance. Koch's explanation of this from the practice of washing linen on ships in the fast flowing Rhone and Saone can hardly apply, since a like practice obtains at Zurich and Stuttgart, which do not enjoy such an immunity. The contagionists neither attack nor dispute the epidemiological facts which I have published on this head; they only ignore them, for they harmonise so little with contagionist theory.

Since 1831 Hamburg has been visited by cholera fifteen times and Berlin twelve times (Table I.) The traffic by land and water between the two cities is extremely intimate, giving every chance for the transference of comma bacilli.

TABLE I.—CHOLERA IN BERLIN.

Year.	Commenced.	Terminated.	Population.	Deaths.	Per 1000.
1831	Aug. 30	Jan. 26, 1832	229,843	1423	6·2
1832	June 17	Mar. 14, 1833	234,171	412	1·8
1837	Aug. 11	Dec. 6	265,394	2338	8·8
1848	July 27	,, 9	400,557	1505	3·9
1849	May 30	,, 11	401,802	3552	8·8
1850	Aug. 6	Nov. 24	405,707	711	1·8
1852	Sept. 4	Dec. 31	413,517	165	0·4
1853	Aug. 7	Nov. 30	415,425	940	2·3
1854	—	—	—	—	—
1855	July 26	Nov. 26	419,241	1385	3·3
1856	—	—	—	—	—
1857	—	—	—	—	—
1859	—	—	—	—	—
1866	June 14	Nov. 17	658,251	5457	8·3
1871	Aug. 14	,, 3	826,341	55	0·07
1873	July 21	,, 7	918,841	740	0·8

CHOLERA IN HAMBURG.

Year.	Commenced.	Terminated.	Population.	Deaths.	Per 1000.
1831	Oct. 31	Jan. 10, 1832	145,383	476	3·2
1832	Feb. 2	Dec. 17	146,365	1459	10·2
1837	—	—	—	—	—
1848	Sept. 1	Dec. 31	167,291	1674	10·0
1849	June 14	Nov. 22	168,061	563	3·3
1850	July 26	Jan. 11, 1851	171,013	400	2·3
1852	—	—	—	—	—
1853	June 23	Oct. 29	182,534	244	1·3
1854	,, 14	Nov. 14	284,274	281	1·5
1855	,, 30	Oct. 22	186,641	175	0·9
1856	,, 13	Nov. 14	187,896	67	0·3
1857	,, 9	,, 27	191,910	483	2·4
1859	,, 9	Oct. 5	196,747	1109	5·6
1866	,, 30	,, 22	214,174	1093	5·1
1871	Aug. 1	Sept. 24	325,332	141	0·4
1873	June 14	Nov. 8	348,127	1001	2·9

The lack of correspondence as to time, severity of the outbreaks in the two places, is notable, especially in the years 1831, 1837, 1848, and 1849. Again, since 1831 neither of these towns has had a winter epidemic, whereas in Munich two out of the three outbreaks during the same period have been in the winter—viz., 1836–7, 1873–4. The seasonal variations in cholera are well shown in the statistics compiled by Brauser from all cases occurring in the kingdom of Prussia from 1848 to 1859, the numbers being grouped in semi-monthly periods. He found that the minimum of cases and deaths fell in the first half of April, the totals being for these twelve years seventy-one and fifty respectively; whilst in the first half of September they mounted to 57,395 cases and 31,048 deaths. Taking the half-monthly minimum of deaths as unity, the rise and fall in the incidence of the disease, as gathered from these statistics, may be thus given (Table II.):—

TABLE II.

Date.		Relative mortality.	Date.		Relative mortality.
April	1–15	1·0	October	1–15	389·2
,,	16–30	1·2	,,	16–31	316·1
May	1–15	2·2	November	1–15	227·2
,,	16–31	6·7	,,	16–30	125·3
June	1–15	39·2	December	1–15	84·9
,,	16–30	48·9	,,	16–31	60·1
July	1–15	61·0	January	1–15	28·5
,,	16–31	108·6	,,	16–31	17·8
August	1–15	223·4	February	1–15	10·2
,,	16–31	439·2	,,	16–28	6·6
September	1–15	620·9	March	1–15	3·3
,,	16–30	510·2	,,	16–31	1·1

How is it possible to account for this enormous rise from 1 to 620, according to season, by the properties of the comma bacillus? Why does the bacillus act so powerfully in Hamburg and Berlin at one epidemic and so feebly at another? There must be a seasonal influence: What is it?

Some think it is due to *temperature*, but although in Hamburg and Berlin epidemics generally begin in June and end in November, less often in October or December, yet there have been severe winter epidemics in Moscow, St. Petersburg, Munich and elsewhere. In Calcutta, where it is endemic, the minimum of cholera is in August or September, the maximum from January to April, mostly April, and the mean temperature in Calcutta in April is 30° C., of August 28° C.—i.e., is nearly equal. But if the comma

bacilli simply pass from man to man season should have no influence, for the temperature of the intestine is constant at 37·5° C.—a tropical climate. There is, however, at Calcutta another climatic factor—viz., the *rainfall*—which in April has a mean of 60 millimetres, and in August of 365 millimetres, the annual average being 1600 millimetres unequally distributed throughout the year. The rains begin in May and end at the end of September or October, the remaining months passing, perhaps, without a drop of rain. Now the monthly mortality of cholera forms a curve exactly inverse to that formed by the rainfall. Rain can hardly affect bacteria, especially comma bacilli, which flourish in moisture and are destroyed by dryness. In Prussia the same correspondence between rainfall and cholera holds, and perhaps the cause of the winter outbreaks at Munich may similarly be explained. The 1873 epidemic in Munich bears this out. It began suddenly in August and as rapidly declined, so that very few cases occurred during October, although at this time there was much movement of the population (changing houses, opening of schools &c.). At the commencement of November it broke out again, and by Dec. 4th it had reached a height of fifty-six cases daily, whereas in the whole of October there were only twenty-one cases reported. Inexplicable on the bacillary contagionist view, it can be readily explained from the localist standpoint. The germ *x* was present in Munich long before the first case occurred. It is an epidemiological fact that cholera in certain places in India and beyond India may remain quiescent for months and then break out again, whilst even longer periods of quiescence must be admitted for the outbreaks in Hamburg, Berlin and Munich. In the summer of 1868, at Bellinghausen, in Essen, and elsewhere in the Prussian Rhine provinces, and in Westphalia, there were cholera epidemics, but nowhere else in Europe; and unless its auctothonous origin be accepted these outbreaks must be referred to the residues of the epidemic of 1866, which had been dormant in Essen. The great epidemic in Egypt in 1883 did not affect the Mediterranean ports that year. France saw in this the efficacy of quarantine, but in 1884 it broke out in that country. So in July and August, 1873, the local outbreak in Munich occurred after a very dry July, and was checked by an exceptionally wet August, but reappeared in the winter during another abnormally dry season. It is remarkable that Augsburg, which suffered so severely in 1854, and into which, in 1873, cases were introduced from Munich, no epidemic occurred in that year. This was not due to disinfection—it was before the discovery of the comma bacillus—but more likely to the excessive rains with which Augsburg was visited in 1873. There is no doubt that like atmospheric conditions played a part in the epidemic at Hamburg this year. The summer had been exceptionally dry and hot; the heat in August was almost unbearable, being about 5° above the average, whilst the rainfall in July, August and September was considerably below the mean :—

	1892.	Mean rainfall.
July	21 mm.	97 mm.
August...	53 ,, ...	77 ,,
September	46 ,, ...	64 ,,
	120 mm.	238 mm.

Naturally also the level of the subsoil water was lowered. The temperature of the Elbe, which is taken in mid-stream every morning, rose in August to 22° C. Yet similar conditions of weather prevailed in other parts of North Germany, which were also susceptible to cholera, but where it has not yet become epidemic, and where probably epidemics will break out shortly. As regards the rainfall, only those places can be compared where observations have been continuous; for, as at Munich and Augsburg, neighbouring districts where the average rainfall is the same may differ very widely in particular years and seasons. The cholera germ from Russia has been more widely disseminated this year in France than in Germany, and that it only found a favourable soil in Hamburg must be due to a special reason. Hamburg for years has been making a special hygienic experiment on the largest scale, for it thinks that it can be cleansed by using an extremely impure water. The Hamburg waterworks distribute unfiltered Elbe water throughout the town and suburbs. In the mains are found dense layers of fungi of vegetable and animal origin; here and there a tap is plugged by the head of an eel. For drinking purposes the water may be filtered at home, or, if this does not suffice, thirst may be quenched by wine, beer, seltzer &c. For all domestic uses, for cleansing rooms and dwellings, courts and streets, the unfiltered Elbe water is alone used, and then, owing to the excellent drainage into the Elbe, part of the refuse of the city must actually flow back into the water mains, thus rendering nugatory the sanitary aim of the drainage system. Above the reservoir the Elbe furnishes a purified water; but it becomes so contaminated on passing through Hamburg that within this area it cannot undergo self-purification. To be serviceable for consumption or domestic use its water should be further purified, as by filtration through sand, as is done at Altona, a few kilometres below Hamburg. At Cuxhaven the Elbe again becomes free from Hamburg impurities. It is plain also that the same degree of contamination may act differently on different soils, and all epidemics of cholera in Hamburg have shown essential differences between quarters situated upon marshy land and upon high ground. Reincke has shown that since the introduction of a drainage system into Hamburg the frequency of typhoid fever has diminished, except for some variations in abnormally dry seasons. Epidemics of typhoid fever have this in common with cholera; but that Hamburg, in spite of its excellent drainage, may still be a fruitful soil for typhoid fever is shown by the epidemics of that disease of 1885 to 1887, whilst this year, associated with cholera, there has been a notable increase in typhoid fever. We are more fortunate in Munich, for formerly, with very good drinking water, but high level of subsoil water, we often had more than twenty deaths annually from typhoid fever among 10,000 inhabitants. However, since 1881, with subsoil water at a very low level, the deaths have not exceeded one. The once notorious typhoid soil of Munich has been gradually purified by sanitation, and we regard with some confidence any fresh visitation of cholera. In Hamburg itself a system of sand filtration was commenced until the cholera intervened, but the new waterworks are expected to be completed in the autumn of 1893. These works on a gigantic scale are under the direction of Engineer-in-Chief A. Meyer and will cost many millions of marks, but not so much as Hamburg has lost by the cholera of 1892.

The part played by water in this epidemic has been variously explained. The "drinking-water theorists" think that comma bacilli from Russian Jews found their way from the Elbe to the reservoirs and were thus distributed throughout the town—a most plausible and comfortable explanation for the laity and the profession. Still experience does not always fit in with this theory, for outbreaks quite as "explosive" have occurred without the drinking water being at fault. I leave it undetermined whether in 1892 the Hamburg water operated directly as drinking water or indirectly as foul usable water. It is strange that in spite of the most careful search they should have had the misfortune not to find any comma bacilli in the Elbe water or in the water from the Hamburg mains. This is said to prove nothing, since other bacteria may be present which fluidify nutrient gelatine. Yet Koch found his bacilli in a Calcutta tank, and Fraenkel in the water of the Rhine, where lay a boat containing a case of cholera. The water of the Indian ponds is not only drunk, but used for bathing and washing. The comma bacilli escaping from the human intestine into river or pool must be overcome by other bacteria and disappear very rapidly. I am not asserting that the comma bacillus has no etiological importance, but I believe it impossible for it to be the *x* which can excite and develop cholera epidemics apart from the *y*. And if we have found a specific microorganism in an infectious disease, we ought to hope that some means may be found thereby to combat the disease. Tuberculosis is a striking example. The discovery of the tubercle bacillus in the sputa of phthisical patients was scientifically as interesting and important as that of the comma bacillus in choleraic evacuations. But since the discovery of the tubercle bacillus, which is older than that of the comma bacillus, neither more nor fewer people have died from phthisis than formerly.

The present protective measures against cholera rest entirely on purely theoretical contagionist bases. We have become very one-sided, thinking that cholera must be met by prevailing theories and not that theory should follow after cholera. It is deemed most important to seize the comma bacillus from the first case occurring in a place, and when its presence is proved, to isolate the patient, disinfect his excreta and his dwelling, and then one thinks that the place, be it village or town, is protected from cholera. If in Hamburg the first case had been isolated and disinfected, the epidemic, so they think, could not have broken out. Until a case comes to official knowledge it is in contact with others and the evacuations are not disinfected; and, when

reported it must be determined bacteriologically whether it is a case of Asiatic cholera or one of cholera nostras. Then the source of infection must be traced, and often the disease breaks out in many parts simultaneously, as it did in Hamburg, adding to the difficulty of the task. Nothing but absolute stoppage of all traffic could avail, and that would be a greater misfortune than the cholera. The spread of the cholera germ is not to be prevented, either in India or outside it, by isolation, disinfection, cordons, quarantines &c. Just as, in spite of custom houses, goods are still smuggled over the frontier, so the bacteria and viruses will be smuggled through all our barriers. Still, improved sanitation may do much to prevent the smuggled germs gaining a foothold. In the sixties, when Prussia, Belgium, Holland and France had most severe epidemics, Great Britain was only moderately invaded, and since 1866, in spite of its colossal traffic with the motherland of cholera, and the introduction of numerous cases from other lands, England has not had a single local epidemic, neither during the cholera time on the Continent from 1871 to 1874, nor during 1884 to 1887. Even this year cholera has not invaded England from Hamburg, Russia and France, although England (London) was the only land which fearlessly trafficked with ships coming from infected ports.

If one cannot act against the introduction of the germ *x*, one must seek to act in the directions of *y* and *z*, and strive to make places or people immune. Every epidemic shows that many do not possess the *z*, the individual disposition, and that they are immune. Some are protected by their own serum perhaps, and it may be possible to ward off cholera, like variola, by protective inoculation. The contagium of variola was not mastered by isolation and disinfection until vaccination proved successful. Cholera is not contagious like variola, but depends on local conditions, and susceptible places may be rendered immune, like Fort William in Calcutta. There have been in other places as severe epidemics as this in Hamburg, but where all these measures of isolation &c. were not in vogue, and where the disease arose and subsided as quickly as it did at Hamburg.

[Professor von Pettenkofer here contrasts the epidemic at Munich of 1854 with the Hamburg outbreak. He goes on to contend that neither military cordons, as in Russia, nor quarantines, nor the forbidding of fairs &c., have any influence, and fears that next year, if there is not much rain, it may spread over Germany.]

The contagionists say that when cholera breaks out in a place the rules demanded by their theory should be enforced. I am convinced that this is a mistake. I know of cases where nothing of this sort has been done and the epidemic has been remarkably mild, much milder than where the contagionist practice has been carried into effect.

[In proof of this Professor von Pettenkofer cites at some detail the outbreak of cholera in Bavaria in 1836, and shows that the authorities acted on the anti-contagionist plan, only transferring those cases to hospital which could not be cared for at home, and not interfering with public meetings and feasts. At that time Munich was in an insanitary state, yet the epidemic was the mildest of the three it has experienced. There was no dread of cholera in those days which he remembers in his youth. Nothing was known of bacteria, and cholera was attributed not to comma bacilli but to the genus epidemicus. Traffic in and out of Munich was not deranged.]

He concludes by expressing the hope that the recent appearance of cholera in Europe will lead to a restriction of regulations based on merely theoretical grounds, so greatly hampering free intercourse and even contrary to humanity, without any practical effect, and that the money expended on them will be devoted to attainable sanitary aims. Reflecting how many millions must have been thus sacrificed to theory in a single town like Hamburg, it is inconceivable, he says, "how opposition can be made to the new military Bill before the Reichstag, which is based on much sounder grounds than the contagionist rules against cholera. I live and die in the conviction that our army will subdue enemies who would invade us from the east or the west, but not that our capture of bacilli, our cholera barracks, isolations, disinfections, prohibitions of entry and transit, or our quarantines can prevent the invasion and the dissemination of cholera."

VACCINATION GRANT.—Mr. James A. Bright, M.R.C.S., has been awarded, for the eighth time, the extra vaccination grant as public vaccinator for the Glastonbury district of the Wells Union.

CHOLERA.

CURRENT NOTES, COMMENTS AND CRITICISM.

THE exceptionally warm and moist or, as it is commonly termed, "muggy" weather which has recently prevailed has probably not been without its effect on this disease, and the number of cases has, perhaps, been somewhat increased by it. Although there are instances on record of the continued prevalence of cholera in winter, the disease usually "dies down," as it is sometimes expressed, during the cold weather, and it is very rare for an epidemic of cholera to manifest itself or extend with any epidemic strength in the winter season. According to the official accounts the disease has died out in Paris, but several fresh attacks have occurred in the north of France. The *Temps* reports nine new cases and two deaths at Etaples, one at Courteville and two fatal cases at Calais. Five fresh cases have been reported from Arras, one from Boulogne and one from Baragnes. Five cases are reported from Avion. One case of choleraic disease was admitted to the hospital at Lyons which town, with the exception of a slight epidemic in 1854, has hitherto escaped cholera. From the Hague we learn that since the outbreak of the epidemic in Holland 225 persons have died of it. The number of deaths from the disease last week was 22, most of which occurred in the province of South Holland. Sporadic cases of cholera continue to occur, however, at Breda, Utrecht, Terheyden, Leeuwarden, Woerden, and Steenbergen, as well as at several places in the vicinity of Woerden. It has altogether disappeared as an epidemic in Hamburg, notwithstanding that an occasional case of choleraic diarrhœa is reported from time to time. The Imperial Office of Health at Berlin has declared Hamburg, Altona and Stettin free of cholera, and the ships from those ports are no longer subject to sanitary inspection. At Budapest there have been altogether 1018 attacks and 440 deaths from the commencement of the outbreak; and the disease still lingers in the city giving rise to some fresh cases—from eight to twelve—daily. The last reports, however, indicated great improvement, as there were only two fresh cases and two deaths in twenty-four hours. Almost all the schools at Budapest have been reopened. It is stated that cholera is spreading in the western, and especially in the southern counties of Hungary. A severe outbreak took place recently in the village of Aradacz, where fifty-seven deaths are reported to have occurred in a population of 1500. The latest news from St. Petersburg is not altogether satisfactory. The exceptionally mild weather has apparently given rise to a recrudescence of the disease. There were 12 cases and 5 deaths on Nov. 14th. The majority of the cases are from the north side of the Neva, where the water-supply is stated to be bad. Local conditions usually exercise a powerful influence and this seems to have been the case in the following instance. One of the latest attacks is that of the English manager of a large cotton mill, where, it is stated by *The Times*, the first authenticated case of cholera at St. Petersburg took place. It is alleged that many cases of influenza have also occurred lately at St. Petersburg. Russia's contribution to the cholera death-roll seems to have been a terrible one, amounting altogether to over 220,000 victims. The famine-stricken districts of the Caucasus have suffered most. In Astrachan there were 7873 deaths; in Veronseh, 9468; in Vintka, 4440; in Samara, 14,962; in Saratoff, 18,992; in Tamboff, 8039; in the district of the Don, 17,751; and in the Caucasus, 63,268. This epidemic of cholera followed in the wake of famine and an epidemic of typhus fever, which is said to have proved even more fatal than the cholera. Confronted with these terrible scourges, and in dire need of sanitary improvements in every town and district of the country, it certainly strikes one with amazement that Russia still seems bent on spending large sums of money in the pursuit of military ambition and a war policy. It does not appear that our latest and more extended study and observation of cholera during the present epidemic is likely to end in any precise scientific unanimity regarding its causes and methods of extension. There seems to be great divergence of opinion in these respects at the

present moment, Professor M. Peter, of the Necker Hospital, Paris, for example, having set forth his views in a clinical lecture on "Indian Cholera, or Cholera Nostras," with reference to the late outbreak at Nanterre and other occurrences at Paris, in a vigorous spirit of unbelief in the current orthodox doctrines. We would call attention to the extremely interesting article "On Cholera, with reference to the Recent Epidemic at Hamburg," by Privy Councillor von Pettenkofer. Apart altogether from the scientific value of the paper, it is impossible to withhold our admiration for the calm courage exhibited by Professor von Pettenkofer and Professor Emmerich in undertaking experiments of the nature described. Professor von Pettenkofer considers that the contagion theory has not been confirmed by the Hamburg epidemic. When cholera breaks out epidemically there is always local predisposition. Individual predisposition without favourable local circumstances will not, in his opinion, produce a cholera epidemic. He places no reliance on the results of the inoculation experiments on animals, and thinks that man is the only animal on whom any experimental results can be relied upon. With the view of testing the inadequacy of individual predisposition to account for an attack of cholera he, together with Professor Emmerich, swallowed considerable quantities of cholera bacilli without any more serious consequences than diarrhœa, which might, of course, be induced by any septic agent. Bacteriological examination of the excreta proved, at any rate, that the experiment was thorough, so far as the individual experimenters were concerned. It has been done before and with similar negative results. We may incidentally refer here to the "Report on the Sanitary Measures in India in 1890-91," just published, for some information regarding the Hurdwar fair and the comma bacillus, which may prove interesting in this connexion. It will be remembered that we had previously called attention to the fact that samples of water taken at the Hurdwar bathing place in 1891 were found to contain quantities of the comma bacillus. It was calculated that the fair was attended by about 700,000 persons, who crowded to the sacred ghat to bathe and take the holy water into their mouths. The appearance of the comma bacilli in the water was accounted for by the presence of cases of choleraic disease at the fair, who either by themselves or by infected articles of clothing introduced the bacilli into the sacred pool. Had an outbreak of cholera occurred subsequently among the pilgrims the positive evidence would naturally have been regarded as something more than a coincidence, and the presence of the bacilli would have been considered its cause; but no such outbreak took place among the crowds of pilgrims returning from the fair. Of course there is no evidence to prove that the bacilli discovered in the samples of water were absolutely identical with Koch's comma bacilli. We have already alluded to Professor Peter's clinical lecture at the Necker Hospital, Paris. It gives a very interesting description of the events that happened at Nanterre, and compares them with some cases at Breteuil in 1884. The lecture is published in the *International Medical Magazine* for October. He boldly strikes at the very root of the specific nature of the cholera-cause, as it were, for he holds that cholera nostras and Indian cholera present the same symptoms, the same termination, the same contagion and the same epidemic manifestations, so that they are, for all practical purposes, one and the same malady. The object of the lecture is to show how a series of morbid troubles can increase and become an epidemic. Diarrhœa first develops, which becomes more and more severe, and finally cholera is produced. This attempt, however, to cut the knot of a pathological difficulty is not likely to be regarded as a successful or satisfactory procedure from a scientific point of view.

Apropos of the disappearance of cholera from Hamburg, a statement to the effect that German toys were manufactured at Hamburg and sent to the London market brought a shoal of letters to a contemporary from persons interested in that trade contradicting the statement that such toys were manufactured in Hamburg; the fear of cholera infection being conveyed to our children in Noah's arks is consequently illusory. With the aid of a lively imagination applying a spur to the fear of possible infection through any and all sorts of channels, it is impossible to impose limits to people's alarmed credulity. But the Japanese authorities were credited a few years ago with going further in the direction of precautionary measures than anybody else, for it was alleged that on hearing that two Japanese sailors had died of cholera and had been thrown overboard, they immediately prohibited fishing along the coast!

THE CHOLERA IN FRANCE.

(FROM OUR SPECIAL CORRESPONDENT.)

A VISIT TO CAEN.

Sanitary Measures against the Havre Steamers.—Dogs and Cholera.—The Legality of Porous Cesspits.—Gutters as Sewers.—A Town for Tourists.

FROM Havre small steamers generally sail twice a day for Caen. Other steamers go to Honfleur and to Trouville. The mouth of the Seine is so wide that these places cannot be reached by train, without travelling inland as far as Rouen. During the height of the epidemic, the ports on the opposite banks of the Seine took alarm and sought to impose all manner of measures against the steamers that brought passengers from Havre. This was the more absurd as these measures could not be enforced against the passengers who came by train. At best they could only lessen the danger by reducing the number of passengers; but as the cholera had already been brought over before any precaution whatsoever was adopted, the suppression of the steamship service could not in any way be justified. The Minister of the Interior, however, had to intervene so as to make the local authorities understand that, whatever might be done with regard to persons coming from foreign countries, the freedom to travel within the country itself could not be interfered with. Thus the steamers resumed their service, but measures were nevertheless taken against the passengers.

I crossed over from Havre on Oct. 25th. Three days previously there had been another death at Havre which was attributed to cholera. It occurred under very curious circumstances. The victim was a lady related to one of the professors in the town. She was devotedly attached to a dog, which had been suddenly seized with violent vomiting, diarrhœa and cramps. The animal died very rapidly, and the carcase was in such a condition that it was not judged prudent to bury it in the garden. It was given to the scavengers and placed on board the boat which takes sludge out to sea every day. Shortly after the lady, who had nursed the dog throughout, was seized with the same symptoms and died at the end of three days' illness. This case has excited great interest in medical circles at Havre, and regret is expressed that the dog's symptoms were not more carefully observed. Of course the owners of the dog were taken altogether by surprise, and suspecting no danger had taken no precautions.

After some two hours' sea journey the Havre boat reached the mouth of the river Orne, which passes through the town of Caen, but instead of steaming up the river, we hoisted the yellow quarantine flag and made for the jetties situated a little distance further along the coasts, and built at the entrance of the maritime canal, by which ships of larger tonnage reach the town of Caen. Here we were boarded by a medical officer under the armed protection of custom-house soldiers. This gentleman went all over the ship, looked at all the passengers, and then gave us permission to pull down the yellow flag and proceed to Caen. We now returned to the river Orne, and an hour's pleasant journey up the narrow stream, winding through a picturesque country, brought us to the landing-stage at the historical and antique capital of the Department of the Calvados. Here again an official came on board flanked by guards, who would not allow anyone to land until they had given in full their names and addresses. On landing the passengers were conveyed under military escort to an office, where those who did not intend staying at Caen, but were proceeding to some other town, had sanitary passports given to them. The passport was identical with the one given at the frontiers. The bearer has to report himself within twenty-four hours to the authorities of the town where he may be going. Any neglect entails imprisonment of from three to fifteen days. Excepting that our luggage was not examined and the soiled linen seized, the same precautions were taken at Caen against passengers coming from Havre as are taken at the frontiers against passengers coming from Russia, Hamburg and other infected places.

That considerable alarm should be felt at Caen when it was known that travellers were coming from towns where cholera prevailed is only natural if we take into account the utter want of sanitation which characterises this place. Some idea of the neglect which prevails in matters relating to public health may be gathered from the fact that the muni-

cipality has not even taken the trouble to draw up vital statistics. At the *Etat Civil*—which corresponds to our registry office, with this important addition, that the registration comprises not only births, deaths and marriages, but the far more complicated records relating to the compulsory military service—there were but four clerks. As a result, no one knew what was the death-rate of Caen; no one knew even what was the average number of deaths at Caen. I was therefore obliged to trespass on the time of these four clerks, and one by one the death registers of the last ten years were pulled down from their dusty shelves, straps and tape undone, and the total number of deaths for each year ascertained. The number of deaths occurring per annum from 1882 to 1891 were as follows: 1253, 1278, 1205, 1344, 1382, 1272, 1357, 1200, 1433, 1470. This is equal to an annual average for the ten years of 1319·5. The population in the first census taken during that period was 43,809, and in the census taken quite recently 46,417. The high death-rate for the last two years is attributed to the influenza epidemic. The number of deaths in the town, I was especially asked to note, was greatly increased by the numerous charitable endowments for which Caen is celebrated. There are the lunatic asylum and the hospital and other institutions, where some 300 persons died in the course of the year, the majority of whom were not inhabitants of Caen. Also there were some seventy stillborn infants counted among the deaths of each year. But these arguments apply to almost all large towns, and are not taken into consideration; therefore, and calculating according to the last census, there is an average death-rate for the ten years of a fraction over 28 per 1000. But, if we estimate the population for the ten years at the average of the last and the previous census, then the death-rate exceeds 29 per 1000; and, finally, if some 200 deaths be deducted on the ground that, though occurring within the town, they properly belong to districts outside the town, we should still find a death-rate of 24 to 25 per 1000, which, for a town of less than 50,000 inhabitants, may be considered very high. The average death-rate for the fifty-one towns in France of more than 50,000 inhabitants is 25·61 per 1000, and no one pretends that this is satisfactory.

Probably the death-rate of Caen would be higher still but for the one great redeeming fact that the town possesses a good water-supply. From the Moulines, a hill some seventeen miles distant, 8000 cubic metres of pure spring water are brought to the town in a closed aqueduct; this water comes from an altitude of 120 metres. The town of Caen is only six metres above the level of the sea; the water is therefore delivered under pressure. The water has been recently analysed in Paris and found to be pure, but it is exceptionally hard. This is so serious a grievance with wine and spirit dealers, that one enterprising tradesman has started a water distillery. The town water soon thickens, and spoils the appearance of the wines and spirits with which it is mixed. Now, however, the trade is provided with pure distilled water, which can be consumed without danger to the public.

Though there is a good water-supply, Caen is in the same position as many other towns: the municipality cannot compel the inhabitants to drink only the town water; but everything is done to encourage the consumption of this pure supply. There are no less than 260 public fountains in this small town. Thus the inhabitants, without having to go any distance, are able to obtain pure water gratuitously. There are, besides, 780 subscribers who have private supplies of the town water within their own dwellings. I was assured that most persons preferred drinking the town water; but it was admitted that there were wells and cisterns, and that some persons drunk either the rain-water collected in their cisterns or the water from their private wells. This is the more deplorable as the drainage of the town is most defective. The municipal authorities profess to believe that the cesspools are water-tight, but such profession is only a matter of form; they know well enough that many cesspools leak. Even if the cesspools were water-tight, the authorities admit that there are *bétoires* in the town. As I have already explained, a *bétoire* is a well or deep hole dug in porous soil, into which houses drain their slops, and all the liquids filter away in the subsoil. It appears that the authorities cannot legally suppress a *bétoire*. The question has been tested by the municipality. An influential resident at Caen was prosecuted because he would not close his *bétoire*. The magistrate held that the law could not interfere with the landowner, who was at liberty to dig as many *bétoires* as he chose. It was only when such *bétoires* caused a nuisance dangerous to public health that the law could enforce the suppression of the nuisance, but not of the *bétoire*. Thus the town lost the case, but nevertheless it has succeeded of late in abolishing a considerable number of *bétoires*, only this was achieved in a roundabout manner. A nuisance had to be proved, and in order that the nuisance should not be renewed the landlords of their own accord suppressed the *bétoires* giving rise to the nuisance. But *bétoires* are still tolerated in those houses that are below the level of the street. The system of slop drainage is to drain all slop water into the street gutter; but when the backyard and entrance passage of a house are below the level of the street, *bétoires* are still tolerated, and all the slops allowed to percolate into the subsoil. The closets in some houses drain into cesspools, more or less watertight; other houses have a rude sort of pail system. Scavengers, with more or less irregularity, come and remove these pails, and the contents are converted into manure. But there are some houses which simply have no closets at all. Needless to say that these contribute largely to the foulness of the streets, the gutters, and the sewers into which these gutters flow.

Caen, it will be perceived, is drained on the old French principle that the sewers should only receive rain and slop water. Perhaps this accounts for the very unsatisfactory position of the main sewer outfalls. One portion of the sewage is discharged into the dock which communicates with the maritime canal, the remainder into the River Orne, before it reaches the town. This portion of the sewage flows back through the town on its way to the sea. By the opening of the dock gates a flush is occasionally created; but though this may be of some service, it is quite evident that the sewers ought not to have their outfall in so small a sewer as the Orne.

In spite of all these organic defects, which show that mischief is more likely to arise from within than to come from without, an official poster has been affixed to the walls of the town, headed "Sanitary Measures." It consists of a lengthy decree issued by the Mayor and approved by the Prefect of Police. The decree forbids the admission into the town of all rags, secondhand clothes, bedding, leather, woollens and animal fragments, unless accompanied by a special permission, which must be given only by the Mayor, and after such articles have been disinfected. Even if the articles come from a non-contaminated district or country they are to be examined and disinfected if judged necessary. Another clause forbids the throwing into the streets of all dejecta; these must be thrown only into the cesspools or the closet pails. Considering that there are some houses that have neither cesspools nor pails, it is difficult to see how this clause of the decree can be strictly observed. I am a witness, on the contrary, that even in some of the best and most frequented streets of Caen dejecta are thrown into the gutter, and this in broad daylight. Another clause forbids the throwing of slop water in the passages, courts, on the pavement — in fact, anywhere except in the gutter. But gutters are small, slop pails are large, and we all know how the scullery maid delights to send the contents splashing forth. This, then, was another sanitary measure more easy to decree than to enforce. The decree goes on to say that the inhabitants should maintain the greatest cleanliness, should sweep and wash out their courts and alleys at least twice a day, as also the gutter passing in front of their houses. Finally, the authorities place gratuitously at the disposal of the public the disinfecting stove, undertake to disinfect any room or apartment, and to give disinfectants to anyone who may require the same. In the hotels there is another decree posted ordering hotel-keepers to report all travellers coming from infected towns, to watch them, and to report at once if they manifest any suspicious symptoms of illness.

In view of these regulations and decrees it was strange to observe slop water on all sides, even in the best streets of Caen. At times, in the lower levels, this slop water forms small stagnant pools. Thus there is constant saturation of the subsoil and evaporation. It did not appear that the decree mentioned above had been strictly enforced. At the end of the Boulevard St. Pierre especially foul odours are noticeable. At this point there are some atrocious latrines, and by their side washerwomen, who wash linen in what appears to be a main sewer. The water issues from under the street and sees the light only for a few yards previously to falling into the dock beyond. If this is allowed in the very centre of the town and on a broad boulevard, what must happen in the back courts and alleys? Yet as Caen is an attractive town for tourists it would be well worth

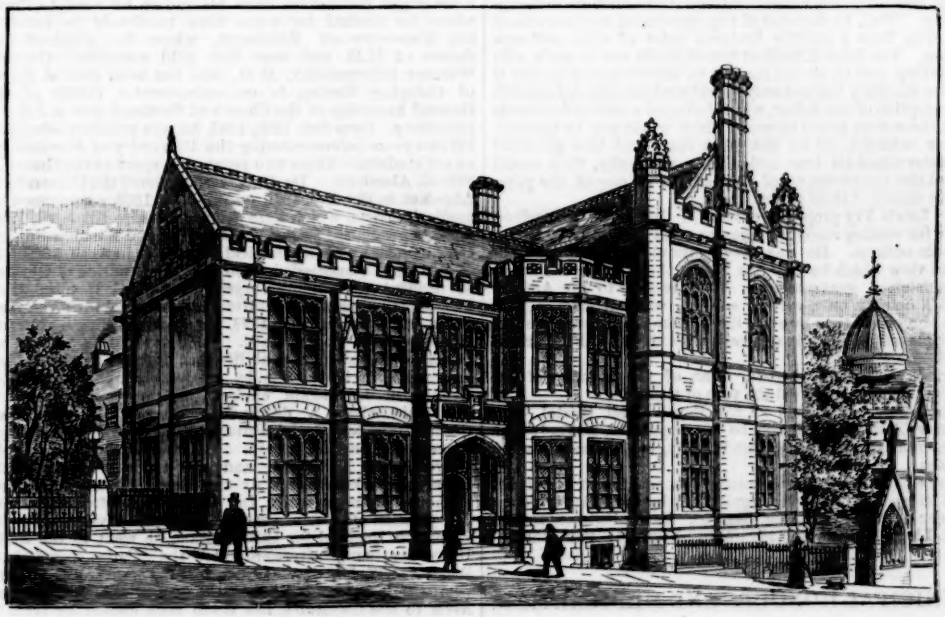
while to improve its sanitary condition; if not for the sake of the inhabitants, then for the sake of the increased income the tourist would bring. Caen is rich in historical and archæological treasures. Here lie buried William the Conqueror and his wife Mathilda, each in a church they themselves had built, and which are amongst the most perfect specimens of Norman architecture still extant. There are many other buildings, churches, private houses &c. dating from the eleventh to the fifteenth century. Most persons who make tours in Normandy and Brittany would find it convenient to visit the town of Caen. This centre of ancient Norman civilisation is well worth being considered as the crowning object of such a tour. But if the local authorities desire to attract a larger number of American and English visitors they must look to the drainage of the town, and effect very material improvements. This also will be found to be the best protective measure against the possible advent of cholera.

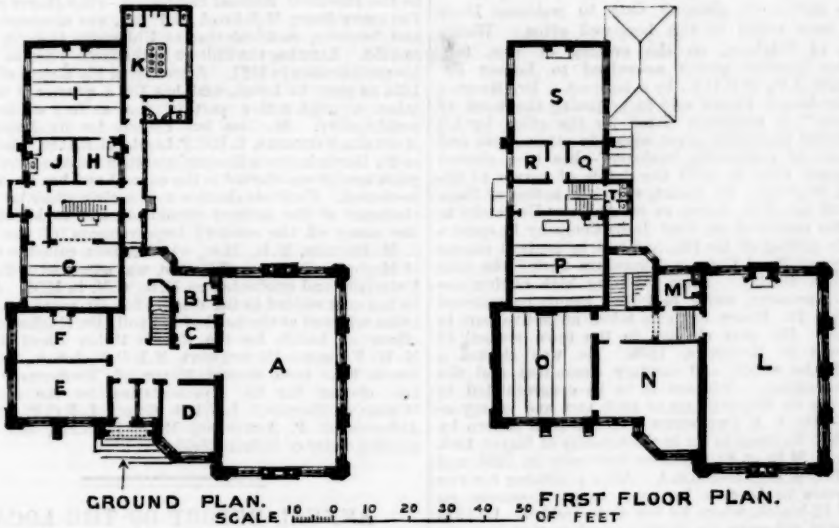
THE BRISTOL MEDICAL SCHOOL.

WEDNESDAY was an important occasion with the Faculty of the Medical School at Bristol. In the early afternoon there was the formal opening of the medical wing of the Bristol University College, built to replace the old medical school at Bristol, which, by the brilliancy of its former students, has made for itself such a distinguished name in the country. The old buildings have long been felt inadequate and are insufficiently dignified for the home of an important and increasing body like the Bristol Medical School. A large sum of money having been raised by subscriptions the council found it possible last year to commence the building of an adequate structure such as would not only cover the needs of the School, but offer a permanent home for the large reference library now being formed by the Medico-Chirurgical Society. The new building, as part of the future grand front of the Bristol University College, has been the subject of careful architectural treatment, the designs being on lines thoroughly English and in keeping with the style prevailing in early Tudor days. The medical and the engineering wings will cost something like £10,000. The feature of the day's proceedings was the presence of the President of the Royal College of Physicians, Sir Andrew Clark, who cordially accepted the invitation of the Dean of the Faculty, Dr. E. Markham Skerritt, to formally open the spacious and excellently fitted wing.

The Chairman having adverted to the importance of the occasion, Mr. Albert Fay, chairman of the Council of the College, explained the present position of the College and the medical school, and why a new building was needed.

Sir Andrew Clark, on rising to declare the building open, said the occasion which had brought them together was regarded, and justly, as one of supreme importance to the ancient city of Bristol, and all joined in the expression of the hope that the movement about to be crowned that day might contribute to the life and work of the next generation. To those accustomed to look only upon the surface of things, this language would appear exaggerated; but to those who penetrated deeper it would not seem strong enough. They had met to inaugurate the reopening of the Medical School of Bristol, begun by the doctors, carried on by the people, incorporated by the College, and now crowned, or about to be crowned, as its medical faculty; they celebrated its second birth and prayed that its second life might be a life of strength, of usefulness and of honour. The existence of a medical school in Bristol was of more importance to the people than to the medical profession; and the participators in the reorganisation of the medical school of the people, the College, and the municipality revived the high and true ideal of the civic life which regarded it as a family life. Of the agents actively at work in evolving the prosperity of a great city such as Bristol the two chief were the moral agent and the health agent; the moral agent, the true and only source of all abiding good, the neglected remedy of social evils and labour disaffection and unreason; and the health agent, the physical framework which penetrated and influenced all that was in man and all that issued from his thoughts. The conditions necessary to the health of the community were not only numerous but complex and constantly varying. Advancing civilisation brought increasing complexities into the conditions of human life, and if human life was to be continued in all its fulness and fruition they must acquire not merely a knowledge of those conditions, but also the power of fulfilling, controlling and readjusting them to the varying life and service of mankind. From time to time the problems of existence in fresh conditions must be reconsidered, and renewed endeavours must be made to discover and set forth the most favouring conditions for birth and growth, for education and development, for work and play, for the maintenance of health and resistance to disease, for adjustment to environment and the evolution of fresh capacities and functions for the prolongation of life and the further physical, mental and moral development of the race. The investigation of all such subjects, and the proper methods of dealing with them, came within the domain of medicine. In a medical school they had a centre of medical and general knowledge, and collected together within it a body of highly-educated men who were striving to find out the widest and most fruitful applications to the practical business of life. The City of Bristol could not have a great medical school in the midst of it without deriving many advantages from its operations and collateral influences; it would bring to the city the latest and best knowledge in practical medicine and surgery and in the department of public health. Bristol was happy in having a medical school which had a justly high reputation, which had produced many distinguished men, which had at various times made substantial additions to their knowledge, and which had done admirable work in the cure of disease, and in the improvement of surgical processes. And now the old school being no longer equal to the educational requirements of the time, they were about to enter into possession. In design and construction, arrangement and fittings, the new school was worthy the highest praise, and might be said to be second to no other provincial school. But it had one defect, which was so serious that, unless it was repaired, the school could neither adequately discharge its functions nor take rank with any leading medical college. The school had no State licence for experimental research, and, as far as he could learn, it had no intention to apply for one. He knew—no one knew better—that many estimable and exemplary people, moved by the tenderest feelings and actuated by the highest motives, refused, on the ground that experimental research was both unnecessary and cruel, not only to sanction such a method of inquiry, but to hold any relations with institutions in which it was sanctioned. He had the profoundest sympathy with such persons. He honoured their feelings and respected their motives, but, firmly convinced that they had been prejudiced and misinformed, he strongly dissented from a judgment founded on inaccurate statements and erroneous considerations. The law of vicarious sacrifice was a law of the physical, mental, moral and spiritual life, and no living sentient being could escape from its operation. It was folly now to argue the question whether experimental research had contributed to the advancement of theoretical and practical knowledge, for it was certain that no substantial advance had been made in physiological knowledge without the assistance of this method of research. By experimental research surgeons had been enabled to arrest or cure disease, and Koch discovered in the presence and action of the tubercular bacillus the true cause of tuberculous or consumptive disease. This discovery had not only thrown a flood of light upon the natural history of consumption, but had enabled them to discover its presence when otherwise unsuspected, and to bring about a successful revolution in the treatment of surgical tuberculosis. By experimental research they had discovered the condition for using with efficiency and safety almost all the stronger and most useful drugs, and by experiments upon animals they had discovered the nature and relations of infectious diseases, and had learned how in some measure to prevent the development and to control the spread of fevers, cholera and anthrax. If experiment were to be suppressed, and if consistently the use of knowledge acquired in this manner were to be rejected, then it was certain that the art of preventing and of curing the diseases of beast and man would decay, and that physical and mental degeneration would follow. The medical school, having been built, fitted and finished, the question arose, How was that costly building to be maintained in efficient working order? Some people would reply that the building was a doctor's business; why do not the doctors maintain it? But in answer to this he would say that the school was more for the advantage of the public than of the profession, and he held that the public was bound in honour to pay for what was consecrated to its service;





A. Museum.
B. Laboratory.
C. Cloak room.
D. Medical tutor's room.
E. Faculty room.
F. Students' room.
G. Lecture room.
H. Ante-room.
I. Lecture room.
J. Ante-room.
K. Latrines.
L. Library.
M. Lecturer's room.
N. Physiology laboratory.
O. Physiology theatre.
P. Anatomy theatre.
Q. Prosector's room.
R. Prosector's room.
S. Dissecting room.
T. Lavatory and w.c.

and in the second place, the doctors, speaking quite frankly, were much too poor to be called upon in a business of that kind to add to the list of their gratuitous services, and even to pay for services which they rendered to others. Men would ask why the medical school should not be self-supporting. Well, he doubted if any provincial medical school was ever, from a strictly business point of view, self-supporting. The Bristol Medical School could not be made self-supporting, and he should suspect its efficiency and dignity if it were so. They had not only a good medical school, but, with the exception of one defect, which he hoped would be soon made good, there were moral interests which would not be ignored. If they believed, as he did, that the moral idea preceded and determined all true and abiding prosperity, they would regard the maintenance of that school as one of the paramount duties of their citizenship.

Mr. Lewis Fry proposed a vote of thanks to Sir Andrew Clark for coming amongst them to open the school and for his able address. He was very grateful to him for the enlarged view which he had put before them of the functions of municipal government. With regard to Sir Andrew Clark's opinion on a certain subject, whether they agreed with him or not they must be thankful to him for the courage he displayed in candidly expressing his views on that difficult question.

Dr. E. Markham Skerritt, Dean of the Faculty of the Medical School, seconded the vote of thanks.

The banquet was held at the Royal Hotel, Bristol. Sir Andrew Clark presided, and he was supported, not only by a representative gathering of the Faculty, but by many leading citizens.

The whole of the arrangements connected with the dinner were entrusted to and well carried out by the following committee:—Dr. E. Markham Skerritt, Dr. Shingleton Smith, Prof. Lloyd Morgan, Mr. Munro Smith and Mr. Paul Bush.

MUNICIPAL HONOURS AND MEDICAL MEN.

LAST year we expressed our gratification at the number of medical men upon whom had been conferred by their fellow citizens the high and distinguished position of mayor, and it is once again our pleasing duty to welcome those who have been called to this honoured office. Within the Dome at Brighton, on the evening of Nov. 9th, nearly three hundred guests assembled to honour Dr. Joseph Ewart, J.P., F.R.C.P., by a banquet. Dr. Ewart—who, as Sir Joseph Fayrer said in proposing the toast of "The Mayor," is eminently fitted for the office by his "high personal character, great scientific attainments and firm methods of conducting business"—has been elected for the second time to fulfil the duties of mayor to the borough of Brighton. Dr. Ewart, who is a native of Cumberland, took his M.D. degree at St. Andrews University in 1853. In the service of the East India Company he spent a considerable portion of his life, and was in medical charge of the Meywar Bheel Corps at Kherwarra during the time of the Indian Mutiny. After receiving high distinctions from the Government, owing to failing health he returned to England. Dr. Ewart has ever taken an active part in local affairs. His first election to the town council of Brighton was in November, 1884. He was elected a member of the watch and sanitary committee and the lighting committee. Brighton is to be congratulated in possessing for its Mayor a man of such tact and energy as Dr. Ewart.—Dr. A. R. CROUCHER, who has been chosen by the borough of Hastings to act in the capacity of Mayor, took the degree of M.D. at St. Andrews University in 1858, and is also M.R.C.S. Eng. and L.S.A. After practising for two or three years in London he went to St. Leonards, on account of ill-health, where he has since resided. In 1874 he was elected alderman for Hastings, and in that capacity was the means of the sanitary committee of the town being formed. He acted as chairman of this committee till the year 1880, and by his advice the Hastings sanatorium was built. Great interest has been taken by him in the water-supply to the borough, and it was mainly owing to his influence that the new waterworks at Filsham were brought forward. He has been fourteen years vice-president of the Sanitary Aid Association, and has been on the Commission of the Peace since 1885. Dr. Croucher is the first Mayor of Hastings who has been elected from outside the council.—The Mayoral chair of Bacup has been occupied on two previous occasions by Alderman W. J. CLEGG, M.D.—namely, in 1884–5 and 1885–6. A native of the town which has honoured him with this distinction, after receiving some slight instruction from his father he went to Paris, where he studied for some time previously to entering the University of Edinburgh, where he obtained the degree of M.D. and was first gold medallist.—GEORGE WRIGHT HUTCHINSON, M.D., who has been elected Mayor of Chipping Norton, is an ex-moderator (1878) of the General Assembly of the Church of Scotland and a J.P. for his county. Born Jan. 16th, 1848, he was privately educated, till two years before entering the University of Aberdeen, as an art student. Those two years were spent at the Grammar School, Aberdeen. Dr. Hutchinson entered the University of Aberdeen in October, 1863, and in May, 1865, commenced his medical studies, which were continued there till April, 1869, when he graduated Bachelor of Medicine and Master in Surgery (at Aberdeen) with academical distinction in April, 1869. In May, 1869, he succeeded Professor Mackendrick of Glasgow as resident and acting surgeon to Belford Hospital, Fort William, Inverness-shire. Here he remained for three years and a half. In January, 1873, he went to Chipping Norton, where he has since remained. Till June of this year he has always declined municipal life, but in that month he was returned at a by-election by an overwhelming majority.—Lymington has again chosen for its representative in the civic chair a descendant of one of the oldest Cornish families, Dr. W. ROBINSON HILL, who was born at Stonehouse, near Plymouth. He studied medicine in the University of Edinburgh, and was twice President of the Royal Medical Society. At the Royal Infirmary he acted as house surgeon under Dr. Gillespie. After occupying the position for one year of resident physician to the Brompton Hospital for Consumption, he went to the Berlin University and afterwards to the Paris hospitals.—REGINALD W. LATIMER GREEN, L.R.C.P. and L.R.C.S.Edin., who was last year elected by the burgesses of Stratford-on-Avon to the mayoralty, has again been chosen by them to occupy the civic chair. After being educated at Queen's College, Belfast, and Edinburgh, he commenced practice at Stratford-on-Avon in May, 1880, where three years after he was elected surgeon to Stratford-on-Avon Hospital and surgeon to the Provident Medical Institution.—The Mayor of Louth, PALEMON BEST, M.B.Lond., J.P. &c., was educated at Bath and Swansea, matriculating at University College, London, in 1858. Entering the College in the same year, he received his qualification in 1861. After taking his degree of M.B. in 1864 he went to Louth, and has for a quarter of a century taken a most active part in the welfare of the Louth municipality. St. Ives has chosen for its Mayor JOHN MICHAEL NICHOLLS, L.R.C.P.Lond., M.R.C.S., who studied at St. Bartholomew's Hospital and then went to Yeovil. Three years ago he was elected to the council and has recently been re-elected. Until his election to the civic chair he acted as chairman of the sanitary committee, and to his energy are due many of the sanitary improvements of the town.—J. M. HUGHES, M.B., M.S., who has been called to the office of Mayor for the town of Ruthin, was educated at Edinburgh University and graduated as M.B., C.M. in 1886. Although he has only resided in the district for six years, he has been twice returned at the head of the poll. Dr. Hughes is medical officer of health for the Ruthin Union Rural District.—N. W. FAIRLESS-HUMPHREYS, M.R.C.S., L.S.A., has for the fourth time been elected Mayor of Montgomery.—Crewe has chosen for its representative in the civic chair WILLIAM HODSON, L.F.P.S. Glas., L.R.C.P. Irel., and Alderman J. P. ATKINSON, M.D., L.R.C.P., has accepted the Mayoralty of Saffron Walden.

ANNUAL REPORT OF THE LOCAL GOVERNMENT BOARD.

ACCORDING to the twenty-first annual report of the Local Government Board the number of medical officers of health a moiety of whose salaries was repaid out of the county funds in 1891 was 1291, the corresponding number of inspectors of nuisances being 1236, whilst the total number of sanitary districts in England and Wales was 1586. The ratio of in-door paupers to every thousand inhabitants in the

provinces varied last year from 7·6 in Sussex to 3·7 in the West Riding of Yorkshire, and 3·3 in South Wales; the corresponding ratio as regards out-door paupers varying from 39·2 in Norfolk to 11·7 in Lancashire. In London the percentages were 14·5 as regards in-door and 11·3 as regards out-door paupers. Amongst the diseases received into the hospitals of the Metropolitan Asylums Board were 5262 cases of scarlet fever, 1313 of diphtheria, 755 of enteric fever and 64 of small-pox. Apart from improvement schemes, loans to the amount of nearly three millions sterling were sanctioned for sanitary purposes in urban districts and for £175,862 in rural districts; the loans for improvement of dwelling accommodation reaching nearly £118,000, besides other loans for over £65,000. These amounts are quite irrespective of large sums that can be raised under powers granted by special Acts of Parliament. Amongst defaulting authorities we find that Newbury, having had six months in which to perform its duty as regards sewerage, has since submitted a scheme for that work. The local board of Staines and the rural sanitary district of Staines have been dealt with in a similar way, and it yet remains to be seen what the result will be as regards both of them. Borstal, near Rochester, and Wetherby, in Yorkshire, have also had six months given to them in which to decide on a method of sewerage. In three cases the Board also gave their consent to proceedings being taken against manufacturers under the Rivers Pollution Prevention Act, 1876. According to the report of Mr. Brydone, the canal boats inspector, it is evident that the condition of the canal boat population is undergoing continuous and steady improvement, the former indecent herding of men, women and children is almost unknown, and the general sanitary state of the boats has much improved.

Under the Sale of Foods and Drugs Acts 29,028 analyses were made, this number exhibiting an increase of about 1600 on the previous year, the analyses amounting to one for every 580 persons in the metropolis and 1 for every 1140 in the provinces. But none at all were made in the parish of St. Martin's-in-the-Fields, none in four administrative counties and none in twenty-seven boroughs; indeed it is surprising that in so many populous and important districts the inhabitants choose, by the election of representatives opposed to the performance of their duty in this respect, to be left altogether without any protection against fraud in the sale of adulterated foods. Then, again, the average penalty was only £1 11*s.* 3*d.*, and it must be obvious that this cannot be deterrent in the case of so remunerative a fraud as that of adulteration. In no less than 1242 cases the fines were of £1 or under. The largest number of samples examined consisted of milk. These were 12,151 in number, and in 13·4 per cent. adulteration had taken place. This exhibits a slight increase on the 12·8 per cent. of last year; but if we take the last three quinquennial periods milk adulteration has been found to diminish from 21·1 to 16·7, and again to 13·2 per cent. of the samples in the respective periods. Butter was found to be adulterated in 15·5, coffee in 17·0, spirits in 19·1, and drugs in 16·4 per cent. of the samples examined. Altogether rather more than 12 per cent. of the total articles of all sorts examined were found to be adulterated. Unfortunately, the practice of adulteration has become a fine art, new methods spring up as the grosser ones are detected, and it behoves public analysts to keep themselves versed in the new devices that are practised. In London the amount of milk adulteration reaches the highest standard, but there are especially gross cases in some provincial towns. Thus in Sheffield the amount of water added in one case amounted to 48 per cent., and the writer of this part of the official report pithily indicates the meaning of such an adulteration by pointing out that an addition of even 10 per cent. of water, which is probably less than the average, enables a dishonest milkman to keep ten cows instead of eleven.

In 1881 the percentage of births not finally accounted for in London as to vaccination was 5·7, since then it has gradually increased until it amounted in 1889 to 11·6, the rates varying from 25·1 in St. Giles's to 2·8 in Whitechapel, the two extremes involving districts in both of which many of the poorer inhabitants of the metropolis reside. The demands on the calf-lymph station are increasing. Last year 7687 children were vaccinated there, besides 350 persons who came for revaccination. The towns and districts now having compulsory notification of infectious diseases contain a population of 12,491,933, and Leeds remains the only really large borough which has not adopted the system. There are, however, other boroughs of over 25,000 which are in the same condition—namely, Aberdare, Crewe, Doncaster, Dudley, Gateshead, Lincoln, Luton, Tipton, Walton-on-the-Hill, West Derby, Wednesbury and Ystradyfodwg. Nearly all these places are known to have grave sanitary faults. A separate report on the past year will, as usual, be prepared by the medical officer to the Board.

THE MANCHESTER LIFE TABLE.

THE Manchester Corporation and their medical officer of health, Dr. Tatham, have, by the construction and publication of the Manchester Life Table, not only thrown a searching light upon the health condition of New Manchester, but have conferred a distinct boon upon all who are interested in the vital statistics of large towns.

It is as nearly as possible fifty years since Dr. William Farr, in the Registrar-General's seventh annual report, published an outline life table for Manchester, which showed that the expectation of life at birth in the Manchester of that day was only twenty-four years, and was sixteen years less than the mean expectation of life at birth in England and Wales. Since that time, although Manchester has, like the rest of England and Wales, experienced a considerable reduction in its death-rate, its excess of mortality has continued to attract much local and public notice. Many attempts have been made in recent years to discredit the value of a death-rate as a test of sanitary condition. These attempts have been mainly based upon an imperfect knowledge of the nature and extent of the disturbing elements of age and sex distribution and of the true import of varying birth-rates. Dr. Farr clearly pointed out years ago within what comparatively small limits the crude death-rate of a population might be absolutely trusted as a health meter, and how, by the construction of a life table, nearly all disturbing elements might be eliminated. When Dr. Tatham a year or two since was appointed medical officer of health for Manchester he appears very wisely to have determined that so soon as the new census supplied him with the necessary data concerning the number, sex and age of the population, he would construct a life table for the city. This resolution was probably strengthened by the persistent assertion that the high death-rates of the city were not due to insanitary condition, but to fallacious statistics.

Dr. Tatham's Life Table just issued is based upon the population of the three unions or registration districts of Manchester, Chorlton and Prestwich enumerated at the censuses in 1881 and 1891 and upon the 135,582 deaths registered within this area in the ten years 1881–90. As the population of this area increased from 528,307 in 1881 to 594,502 in 1891 it follows that the life table is based upon the recorded mortality during more than five million years of life, a basis sufficiently large to yield thoroughly trustworthy results. It is pointed out by Dr. Tatham that this area is somewhat larger than that of the city of Manchester, as extended by the Act of 1890, but may be taken as representing the enlarged city with sufficient approximation. The Manchester Life Table therefore gives the life history of a complete generation of 100,000 persons exposed at each successive age to the varying rates of mortality that prevailed within the above-mentioned area during the ten years 1881–90. It is scarcely necessary to point out that the results of this Life Table are far less unfavourable than they would have been if it had been based upon the statistics of the far smaller, more central, and more densely populated area of the city previous to the large extension of 1890. Still more unfavourable would the table have been if it had been constructed, as was Dr. Farr's table, referred to above, from the mortality experience of Old Manchester, or the Manchester registration district. Of New or Greater Manchester the table gives an accurate and incontestable measure of health and a sound standard for testing its sanitary progress during the new decennium which commenced with 1891.

Dr. Tatham, in his preface, acknowledges the assistance he has received in the mathematical part of the work from Mr. A. C. Waters of the Registrar-General's Department, and it is impossible to speak too highly of its method and of the arrangement of its tables. We should have liked to see included in the tables the rates of mortality per 1000 at successive ages and age periods, but the means are given for supplying this additional information. The full and careful

description of the principles and methods adopted in the construction of the Life Table will be found very valuable by medical officers of health of other large towns who are disposed to follow the excellent example set them by Dr. Tatham by constructing life tables for the populations under their charge.

We must now, however, proceed to notice a few of the more salient points in connexion with the health of Manchester which have been brought to light by this Life Table. The most important results of a life table may be said to be crystallised in the mean duration of life (or expectation of life at birth) which it shows. The Manchester Life Table shows that, based on the mortality experienced in Manchester during the ten years 1881–90, the mean duration of life of the Manchester population is 36·6 years, or 34·7 years for males and 38·4 for females. Compared with Dr. Farr's English Life Table (1838–54), the mean duration of life of persons of both sexes in Manchester is too short by 4·3 years; whereas, compared with Dr. Ogle's more recent table (1871–80), life in Manchester is shortened by 6·4 years. Male life in Manchester is shorter by 5·2 and 6·6 years respectively than the English means shown by the 1838–54 and 1871–80 tables; the defect of life among Manchester females, compared with the same tables, is 3·4 and 6·2 years respectively. It is scarcely necessary to point out that when the completion and publication of the census tables make it possible to construct a new English Life Table for the ten years 1881–90, the mean duration of life in England will be found to have considerably increased, and therefore the loss of lifetime in Manchester is undoubtedly understated by the figures given above. On the other hand, it should be noted that Manchester, as one of the very largest English towns, might not unreasonably claim comparison of its mortality statistics with those of other large towns rather than with those of the whole of England and Wales. It is, however, so far as we are aware, a fact that the Life Table now under notice is the first that has been constructed in recent times for any large English town.

Returning to the results of Dr. Tatham's table, it is interesting to note that the recorded mean annual death-rate in the area taken to represent New Manchester during the ten years 1881–90 was 24·2 per 1000, whereas in the hypothetical stationary life-table population the rate is shown to be 27·4 per 1000. This difference is entirely due to the abnormal age distribution of the real Manchester population, which contains an excessive proportion of persons at the ages when mortality is low, due partly to the excess of births over deaths and partly to the immigration of young adults. Of 100 born in Manchester only 21 live to the age of 65, whereas according to the general English table 31 out of 100 born survive to this age. Dr. Tatham calls attention to a feature of his life table, which points conclusively to the favourable effect of the rural immigration into towns upon the mortality at certain ages. Of 100 born in England and Wales 74 survive to complete their fifth year, while the survivors to this age in Manchester are but 70 out of 100; during the age period, 5—15, the probability of surviving is, however, almost as great in Manchester as in England and Wales generally; and in the next period, 15—25, the probability of survival is distinctly greater by the Manchester table than by the general English table. Dr. Tatham points out that these facts appear to "lend some colour to the suggestion that the effect of the greater mortality among young children is to weed out the more feeble, so that those who reach maturity shall be selected lives," but he proceeds to show that as, at all subsequent ages, the excess of mortality in Manchester reappears with increasing intensity, it seems impossible to doubt that the low Manchester death-rate between the ages of ten and twenty-five is due to the large immigration of selected lives at these ages. It is, moreover, obvious that the mortality at these ages recorded in towns understates the real mortality, since town immigrants frequently return to their rural homes in case of serious illness or disablement. If the Manchester table can be taken as typical in its general features of what the life-table statistics for other large English towns would be, which there seems no reason to doubt, then the heaviest life-tax in urban populations is in early childhood and between forty-five and sixty-five years of age, when the stress of urban residence seems to have most fatal effect.

Space will permit us to refer to only one more of the many practically useful deductions which Dr. Tatham draws from his Life Table. The ordinary life table shows how many of a certain number born survive to each year of age, and also the expectation of life at each age. This information, however, as Dr. Tatham points out, gives no indication of the relative working capacity of different populations. In other words, we want as evidence of true sanitary condition further information to enable us to estimate the proportion of a living population that is endowed with health and working capacity. It may be safely assumed that in Manchester, beyond the loss of lifetime due to the high death-rate, there is a further loss of working capacity among the survivors due to a higher sickness rate than that which prevails generally in England and Wales. Dr. Tatham points out how the Manchester Life Table may be said to show the lower vitality of the living population of Manchester compared with that of the whole country. According to the English Life Table the expectation of life among males at the age of 65 years is 10·8 years, whereas in Manchester it is necessary to go back to the age of 58½ years to find an expectation of life equal to 10·8 years. Further, the probability of a male in England and Wales aged sixty-five years living a year is 0·95,409; while in Manchester 0·95409 is slightly above the probability of a male aged fifty-seven living a year. Dr. Tatham seems, therefore, justified in asserting, on the strength of his table, that the vitality of males aged between fifty-seven and fifty-eight and a half in Manchester does not exceed that of males aged sixty-five years in England and Wales.

These are some of the more important deductions that may be made from this Manchester Life Table, which derives much of its interest from the fact of its being the first modern life table for a large English town. We venture to hope that the medical officers of some of the other large towns will follow Dr. Tatham's example, since the possibility of a comparison between two or three urban life tables would throw valuable light upon one or two of the most interesting features of the Manchester table, and would add considerably to our knowledge of the true import of the vitality and mortality statistics of our large towns.

THE PRISON REPORTS.

THE reports annually made to the Home Department by the Prison Commissioners and the Directors of Convict Prisons are usually worthy of serious attention and on the present occasion derive even more than their ordinary interest from the circumstance that the course of recent discussion has led the compilers to address themselves specially to the inferences which are to be drawn from the statistics which they present. Some doubt has by recent writers been thrown upon the view, which we are all very willing to accept, that the great diminution of the prison population which has been so marked a feature of the reports of recent years is attributable to a lessening of crime. It has been argued that changes in our way of dealing with criminals rather than a change in the amount or character of crime afford the explanation of what is, on the face of it, a most beneficial change in our social condition. The view of Sir Edmund Du Cane and his colleagues does not bear out this pessimist contention. On the contrary, these authorities consider that the long-continued tendency towards a diminution of numbers which the prison population is manifesting in a very remarkable degree at the present time is indicative of an amelioration in manners rather than in laws. They attribute it mainly to the successful operation of remedial agencies by which the novice in crime is reclaimed from evil courses, and prevented from developing into the habitual criminal. It is, from our point of view, eminently satisfactory to receive such a testimony to the success of remedial treatment, and to have its value brought home to the public mind in this way. Popular ideas as to the ends of criminal justice are apt to be very confused, and in the past especially a just indignation at the iniquity of crime has been too much the animating temper of the Legislature in its dealings with the criminal. Of late more enlightened views have begun to prevail, and crime has been considered in its character as a social problem no less than in that of a public peril. The passion which inspires a lynching mob has given way to a more reflective temper, and it has been found that there are ways more excellent of dealing with a criminal than it is given to a mob to discover. No doubt there exists at the present time a large number of cases which can only be classed as morally incurable, but that is in no small degree the vice of imperfect methods. The remedial treat-

ment of criminals is a subject far, as yet, from having been worked out, and it should occasion no surprise if in this, as in other matters, we have to pick our way by slow and devious steps to a full understanding of the subject. That progress is likely to be of this character we have very specific warning in these pages from a prison chaplain whose observations are quoted in the Commissioners' report and who remarks that "there is an overlapping of labour in rescue effort which is acting very perniciously to the work generally and to the interest of the fallen woman individually. With such contentions for her case and with such notice as she is at present receiving, she is beginning to look upon herself not as a penitent, but as a person of a certain value for philanthropic advertisement." Errors so palpable as this will no doubt be soon corrected. The important point to be gained is that the problem of suppressing crime should be identified with that of reclaiming the criminal, and that mere sentiment, whether of indignation at the crime or compassion for the criminal, should come to be regarded as irrelevant in this connexion—as irrelevant as in the discussion of figures or of facts. How much may be learnt by mere observation carefully and systematically carried out is suggested, and to some extent illustrated, by the brief but significant remark which the Commissioners make that "Idleness is the offence which most commonly leads to punishment while in prison, as it is probably the cause of most of the offenders being there at all." Another inquiry of no less importance which is suggested and to some small extent perhaps advanced by the present report is that into the obscure and intricate relation between drink and crime. Many people are convinced that the relation is a simple one—that, namely, of cause and effect; but this has never yet been proved. Drunkenness and crime go hand in hand, but the very interesting diagrams which this report contains of the growth and prevalence of these two forms of vice over a series of years cannot fail to suggest to those who study them that the true relation between drink and crime is at the present time a matter to be investigated rather than to be explained.

THE FIFTH CONGRESS OF ITALIAN MEDICINE.

UNLIKE its predecessors, this gathering had a special significance, that of being in some measure a rehearsal of the great International Congress which will meet in Rome on Sept. 24th, 1893. Dr. Baccelli opened the proceedings in the Aula Magna of the Roman University, and his short address was to the following effect:—

"Next year, as you all know, Rome will be the seat of the Eleventh International Congress of Medicine and Surgery. This fact obliges us more than ever to close up the ranks and to perfect the discipline of our medical forces, in order that the sittings of that Congress may issue honourably and be of good omen for the Italian name. The question which dominates every other is of a clinico-hygienic character—the study, to wit, of infectious maladies and the best means of combating them. Of many of these diseases the nosographic work is almost complete, of several the nosogenic work is well advanced, while there is wanting to all the 'posology' of infections or the determination and action of the toxic substances which are bred in human organisms by the action of pathogenic micro-organisms or by the reaction of the elements that compose the tissues. Arduous is the undertaking beyond all precedent. But here also the inductions of the clinical ward precede the studies of the laboratory and yield us a measure of moral certainty, while the irrefragable proof, which is always that by experimentation, will be furnished us if we sedulously labour in observance of the rubric of the ancient academy of research—'testing and retesting.' The clinique and the laboratory ought to march hand in hand with perfect harmony. The one represents the treasury of the experience of centuries, the other the conquests of to-day. It is only error which we ought to combat, but we have no right to demolish or to substitute at will for the sake of novelty. We must know profoundly the history, the circumstances and the arduous progress of the medical idea. We must be just with all, and above all we must be logical. Conceding the honours of the day to the study of infectious diseases, we must not lose sight of the scientific and professional (*artistica*) ground already gained. Nay, we must perfect it with time and ever maintain burning the sacred fire of research. Not every Italian study, honourably known to history and to fame, is adequately appreciated by our brethren beyond the Alps and beyond the seas. It is our duty to diffuse the knowledge of such and to redomesticate it, if credited to another, by opportune vindication. Let us never lose sight of the fact that if science can give us great and ardently longed-for satisfactions, practice is what, in the social order, diffuses the prestige of our service. Between a true remedy and a conquest of science, suffering humanity will give the palm to the former. The solitary satisfaction of the soul belongs to pure mathematics; we can always keep ourselves mindful of the fact that 'nisi utile est quod facimus, stulta est gloria' (unless our work be useful, the glory of it is foolish). Gentlemen, an illustrious clinician, a noble intellect, endowed with varied and profound culture, Cesare Federici, is no more. To him be the honour and the regrets which are his due. But the most fervid and sincere prayers are invoked for our Arnaldo Cantani, that his lofty intellect and profound goodness of heart may soon be restored to him, and through him to us, so that he may live to be one of the strenuous champions in these encounters of the Italian professional arena. There is one in Italy who is always foremost wherever a disaster or a joy saddens or exhilarates the heart of the nation. This one has authorised me to announce to you that 'he will inaugurate in person the International Congress.' To him be, therefore, our gratitude. Let a new omen of scientific and professional greatness be the name of Humbert."

The discourse, delivered with characteristic *brio*, was loudly applauded, after which the Congress settled down to the agenda paper. Professor Forlanini read his "Velazione" on Ærotherapy, which occupied the rest of the forenoon; and in the afternoon Dr. Baccelli commented on some peculiarities of the blood and urine of malarious subjects, followed by an elaborate memoir of Professor Maragliano of Genoa entitled "Sull' Azione Alterante del Siero del Sangue Patologico-sulle Emazie" (*αἱματία*). The subsequent sittings of the Congress included papers and discussions, such as those of Professor Lombroso on the Character of Born Delinquents or Moral Maniacs and on their Analogies with Epileptics; of Professor Rummo on Paraplegia Spastica Congenitalis; of Professor Riva on Rheumatic Infection; and of well-known clinicians and consultants such as Ferletti, Cavallero, Castellino, Sansoni, Masini, Borgherini, Caffarelli, Giuffrè, Lipari, Spallicci and others. The proceedings terminated with a banquet, at which Dr. Baccelli took the chair; while the scientific outcome of the Congress will be found officially embodied in the "Atti," as revised by the authors of the several papers and by the critics who followed.

Rome, Nov. 1st.

BOLINGBROKE HOUSE.

ON the 11th inst., at St. Mark's Vestry Hall, Battersea Rise, a meeting was held for the purpose of calling public attention to the financial difficulties of the above institution, and to make better known the objects of the hospital. Bolingbroke House will afford "a home in sickness for those who need the advantages of hospital treatment and nursing and are able to pay wholly or partially for the same." Lord Battersea, who presided, said he was surprised that the hospital was so little known. There were many people who could not afford to have operations performed at their own homes and who did not care to be the recipients of hospital charity, willing to pay the sum of two or three guineas per week if they only knew of the existence of such an institution as Bolingbroke House. This was practically the first hospital to adopt the system of "paying patients," which had been adopted by many other institutions; but Bolingbroke House supplied luxuries and comforts which could not be obtained elsewhere. He hoped that the public would freely subscribe to the good work that was being done, and that the work would not be stopped for the want of a few pounds.

Sir Henry Peek, Bart., proposed the following resolution, which was seconded by Mr. Oram, who emphasised the fact that the institution was in reality not a hospital, but a "home": "That the work which has been done at Bolingbroke House in the past twelve years, during which time 1200 patients have been received in addition to much assistance given in emergency cases, has been a great public

benefit, especially to this neighbourhood, and shows the urgent necessity for the maintenance and development of the hospital."

The Hon. Conrad Dillon, in submitting a resolution to the effect that, "although those patients who have paid only a proportion of their cost have contributed according to their means, the receipts have fallen short of the expenditure and prevented the hospital from being self-supporting, and therefore it is expedient that a sum of at least £2000 should be raised forthwith to prevent its being closed," spoke of the energetic labours of Canon Erskine Clarke, who had founded the hospital and who had for the past twelve years supplied the funds. He said that the finances were now in such a state that if the hospital were to cease its work to-morrow they would be exactly solvent.

Both resolutions being carried, Mr. T. Bryant, President of the Royal College of Surgeons, testified to the excellence of the hospital arrangements. In all nearly 200 large operations had been performed with very little mortality, and this he attributed to the airy wards, good nursing and good food.

The meeting having recorded its appreciation of the services of the committee of management and the staff in carrying on the institution, a vote of thanks to Lord Battersea terminated the proceedings.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6375 births and 3817 deaths were registered during the week ending Nov. 12th. The annual rate of mortality in these towns, which had increased from 17·3 to 19·6 per 1000 in the preceding four weeks, declined to 19·5 last week. In London the death-rate was 18·8 per 1000, while it averaged 20·1 in the thirty-two provincial towns. The lowest rates in these towns were 13·0 in Leicester, 13·1 in Wolverhampton, 15·2 in Norwich, and 16·1 in Derby; the highest rates were 25·1 in Bolton, 26·7 in Hull, 28·0 in Salford, and 29·6 in Preston. The 3817 deaths included 434 which were referred to the principal zymotic diseases, against 407 and 434 in the preceding two weeks; of these, 139 resulted from measles, 81 from diphtheria, 74 from scarlet fever, 55 from whooping-cough, 46 from diarrhœa, 34 from "fever" (principally enteric), and five from small-pox. These diseases caused the lowest death-rates last week in Derby, Halifax and Norwich, and the highest rates in Plymouth, Hull, Croydon, Preston and Salford. The greatest mortality from measles occurred in West Ham, Oldham, Brighton, Croydon, Portsmouth, Hull and Salford; from scarlet fever in Croydon, Cardiff, Plymouth, Salford and Preston; from whooping-cough in Croydon, Salford and Preston; from "fever" in Portsmouth, Birkenhead and Wolverhampton; and from diarrhœa in Preston, Leicester and Oldham. The 81 deaths from diphtheria included 51 in London, 4 in Sheffield, 3 in Cardiff, 3 in Manchester and 3 in Leeds. Three fatal cases of small-pox were registered in Sheffield, one in Halifax and one in Huddersfield, but not one in London or in any other of the thirty-three large towns; 3 cases of this disease were under treatment in the Metropolitan Asylum Hospitals and 2 in the Highgate Small-pox Hospital on Saturday last. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 4063, against 3936, 4012 and 4067 on the preceding three Saturdays; 403 new cases were admitted during the week, against 410 and 462 in the preceding two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 267, 296 and 319 in the preceding three weeks, further rose last week to 357, but were 39 below the corrected average. The causes of 75, or 2·0 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Cardiff, Bolton, Preston, Newcastle-upon-Tyne, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Leicester, Liverpool and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in eight of the largest Scotch owns, which had increased from 19·0 to 22·9 per 1000 in the preceding three weeks, declined again to 20·6 during the week ending Nov. 12th, but exceeded by 1·1 per 1000 the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 14·5 in Paisley and 14·9 in Greenock to 22·4 in Glasgow and 26·0 in Leith. The 574 deaths in these towns included 61 which were referred to measles, 19 to scarlet fever, 9 to whooping-cough, 9 to "fever," 6 to diarrhœa, 5 to diphtheria, and one to small-pox. In all, 110 deaths resulted from these principal zymotic diseases, against 80 and 108 in the preceding two weeks. These 110 deaths were equal to an annual rate of 4·0 per 1000, which exceeded by 1·8 the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of measles, which had increased in the preceding seven weeks from 12 to 69, declined last week to 61, of which 23 occurred in Edinburgh, 19 in Aberdeen, 11 in Leith, and 7 in Glasgow. The deaths referred to scarlet fever, which had been 14 and 13 in the preceding two weeks, rose again last week to 19, and included 14 in Glasgow, 3 in Edinburgh, and 2 in Leith. The 9 fatal cases of whooping-cough exceeded by 4 the number in the preceding week, and included 8 in Glasgow. The deaths referred to different forms of "fever" which had been 2 and 5 in the previous two weeks, further rose to 9 last week, of which 6 occurred in Glasgow. The 5 fatal cases of diphtheria showed a marked further decline from those recorded in recent weeks, and included 2 in Edinburgh and 2 in Glasgow. The death from small-pox was registered in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 138 and 142 in the preceding two weeks, were again 142 last week, and were 120 below the number in the corresponding period of last year. The causes of 63, or nearly 11 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased from 19·4 to 28·5 per 1000 in the preceding three weeks, declined again to 23·9 during the week ending Nov. 12th. During the first six weeks of the current quarter the death-rate in the city averaged 23·1 per 1000, against 17·8 in London and 21·6 in Edinburgh. The 160 deaths in Dublin during the week under notice included 5 which were referred to different forms of "fever," 2 to measles, 2 to diarrhœa, and not one either to small-pox, scarlet fever, diphtheria or whooping-cough. In all, 9 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1·3 per 1000, the zymotic death-rate during the same period being 1·8 in London and 5·7 in Edinburgh. The deaths referred to different forms of "fever," which had increased from 2 to 10 in the preceding three weeks, declined again to 5 during the week under notice. The 2 fatal cases of measles exceeded the number recorded in any recent week. The 160 deaths registered in Dublin last week included 25 of infants under one year of age and 45 of persons aged upwards of sixty years; the deaths of infants showed a marked decline, while those of elderly persons showed a further increase upon those recorded in recent weeks. Six inquest cases and 4 deaths from violence were registered; and 41, or rather more than a fourth of the deaths, occurred in public institutions. The causes of 19, or nearly 12 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF MEDICAL STAFF.

SURGEON-COLONEL JAMESON has re-embarked for Egypt on return from sick leave of absence. Brigade-Surgeon-Lieutenant-Colonel Comerford has arrived in Bermuda and assumed the duties of Senior Medical Officer. Brigade-Surgeon-Lieutenant-Colonel Scott has embarked for India on a tour of foreign service, and Brigade-Surgeon-Lieutenant-Colonel Barrett, whose promotion was recently gazetted, has arrived home in the *Tamar* on completion of a tour. Surgeon-Captains Lynden Bell and Gubbin have arrived at Bermuda for duty, and Surgeon-Captain Reilley has obtained leave from there. The following officers have embarked for India in the *Crocodile*:—Surgeon-Captains Tate, Watson, Mumby, Brogden, Birch and Kelly. Surgeon-Captain Carr has arrived home in the *Serapis*. Surgeon-Captain Risk has

been posted to Aldershot, and Surgeon-Major Drury has obtained sick leave from that station. Surgeon-Captain Barton has rejoined at Holme. The death of Surgeon-Captain Waller has been reported from Bengal.

ARMY MEDICAL STAFF.

Brigade-Surgeon-Lieutenant-Colonel John Ross Murray, M.D., F.R.C.S. Edin., has been placed on retired pay.

ARMY VETERINARY SCHOOL.

Veterinary-Captain Seaward Longhurst, Army Veterinary Department, has been appointed Professor, vice Veterinary-Captain Fred Smith, whose period of service in that appointment is about to expire.

INDIAN MEDICAL SERVICE.

The following appointments have been made:—Surgeon-Captain A. H. Nott, Officiating Second Resident Surgeon of the Presidency General Hospital, to act as Civil Surgeon of Birbhum. Surgeon-Captain B. D. Basu, I.M.S., has been transferred from general duty, Scinde District, to general duty, Bombay, Deesa, and Aden Districts. Brigade-Surgeon-Lieutenant-Colonel R. P. Ferguson, A.M.S., having been appointed an Army Medical Officer in the Bengal Command, has been directed to proceed to Allahabad in order to take over the administrative medical charge of that district. Surgeon-Major B. Doyle has been posted to Ferozepore. Mr. H. A. Hall and Surgeon-Lieutenant-Colonel S. M. Salaman, M.D., have respectively delivered over and received charge of the Yerrowda Central Gaol. Surgeon-Captain A. V. Anderson, M.B., has been appointed to act as Deputy Sanitary Commissioner for the Western Registration District. The following promotions are made subject to Her Majesty's approval:—To be Surgeon-Lieutenant-Colonel from Oct. 1st, 1892: Surgeon-Major A. N. Rogers-Harrison, M. P. L. Beech, and H. P. Esmonde-White. To be Surgeon-Majors from Oct. 2nd, 1892: Surgeon-Captain J. L. Van Geyzel, H. N. V. Harington, G. M. F. McKee, J. A. F. Burton, and F. J. Doyl.

NAVAL MEDICAL SERVICE.

The following appointments have been made:—Fleet Surgeon J. Lyon, M.D., to the *Impregnable*. Staff Surgeons: T. E. H. Williams to the *Pelican* and G. F. Watts to the *Beagle*. Surgeons: William R. M. Young to the *Wildfire*, for Sheerness Dockyard; R. Hickson to the Bermuda Hospital; O. S. Fisher to the *Alacrity*; J. Lowney to the *Redpole*; E. E. P. Tindall to the *Plover*; E. C. Lomas, M.B., to the *Pigmy*; J. Dawson to the *Pembroke*; B. S. Mends, to the Portsmouth Division, R.M.A.; A. Kidd to the *Caroline*; E. E. Bray to the *Mercury*; E. J. Swan to the *Archer*; F. W. Parker to the *Cambridge*; and E. A. Shaw, B.A., M.B., to the *Hearty*.

VOLUNTEER CORPS.

Artillery: 2nd Hampshire (Southern Division Royal Artillery): Surgeon-Captain B. J. Guillemard, M.D., has resigned his commission. The Volunteer Officers' decoration has been conferred upon the following:—Surgeon-Lieutenant-Colonel Thomas Henry Moxon, 1st Norfolk Artillery; Brigade-Surgeon-Lieutenant-Colonel Stephen Moulton Hopson, 3rd Volunteer Battalion, the Norfolk Regiment; Brigade-Surgeon-Lieutenant-Colonel Geo. Sampson Elliston, 1st Volunteer Battalion, the Suffolk Regiment; Surgeon and Honorary Surgeon-Major John William Harper, retired, 2nd Volunteer Battalion, the Suffolk Regiment; Surgeon-Major Daniel Bailey Balding, 1st (Hertfordshire) Volunteer Battalion, the Bedfordshire Regiment; Surgeon-Major (ranking as Lieutenant-Colonel) Alfred T. Brett, M.D., retired, 2nd (Hertfordshire) Volunteer Battalion, the Bedfordshire Regiment; Honorary Assistant Surgeon William Gimson, M.D., retired, 3rd Volunteer Battalion, the Bedfordshire Regiment; Surgeon and Honorary Surgeon-Major Theophilis Wm. Trend, M.D., retired, 2nd Volunteer Battalion, the Hampshire Regiment; Brigade-Surgeon-Lieutenant-Colonel Henry Robert Smith and Surgeon and Honorary Surgeon-Major John Robert Kealy, M.D., retired, 3rd Volunteer Battalion, the Hampshire Regiment; Brigade-Surgeon-Lieutenant-Colonel Fredk. Fawson, Lee, M.B., 1st Wiltshire Rifle Volunteer Corps.—*Rifle:* 2nd (Westmoreland) Volunteer Battalion, the Border Regiment: Surgeon-Lieutenant R. W. Leeming has resigned his commission.—4th Volunteer Battalion, the King's (Liverpool Regiment): Surgeon-Captain W. J. Fleetwood, M.D., has been appointed Surgeon-Major.

EXAMINATION.

A medical examination has been ordered by the War Office of candidates for the Royal Military College, Sandhurst, to be held at the Offices, King-street, Westminster, on the 28th and 29th inst.

SICKNESS IN THE ROYAL WELSH FUSILIERS.

According to the Indian papers the Peshawur Valley has been very unhealthy this year. The Royal Welsh Fusiliers have lost many men during the hot weather and rains, and have a large number of sick in hospital with fever. The regiment is stated to be under orders for Nowshera. The whole valley is well known as a malarious locality, and the form of fever which occurs there has certain features which have given rise to the name of "Peshawur fever"; and it is alleged that the unusually heavy rains which occurred a few months ago gave rise to a considerable increase of that disease. Removal from the locality and complete change of climate is recognised as the only remedy where it is at all intractable and does not yield to treatment.

The usual "Report on the Sanitary Measures in India in 1890—91," for presentation to both Houses of Parliament has just been issued. It contains chapters on the health of the European and native, with which we have already dealt, on the health of prisoners in gaols and on that of the general population, together with chapters on medical institutions, including medical schools and lunatic asylums, and on sanitary works. Appended to the report are abstracts of reports by the Sanitary Commissioners in India, and memoranda by the Army Sanitary Commission in England. We hope soon to deal more fully with this blue-book.

Correspondence.

"Audi alteram partem."

THE BRADSHAW LECTURE.

To the Editors of THE LANCET.

SIRS,—Dr. Gee in his recent Bradshaw Lecture, which is published in the current number of THE LANCET, told us among other things that he had sometimes found the scalp in tuberculous meningitis too tender to bear shaving and commended this observation, among others, to the consideration of "those who find a difficulty in believing that leeches or blisters applied to the skin can possibly affect a deeply seated part with which the skin has no obvious connexion." I do not know whether Dr. Gee meant his admonition for me, or only whether the consciousness of coming within its scope made me suppose so; but when something is commended to my consideration by a person in a place of authority, and one whom I respect so much as Dr. Gee, it behoves me to give my respectful consideration to it. As it is not easy to say what is possible I will be content with what is probable, and I will deal in especial with the subject of meningitis, to which he has given prominence. The case stands thus, if I may try to expand Dr. Gee's statement of it without misrepresentation. The scalp may become tender in meningitis, though there is no obvious connexion between the seat of the tenderness and the seat of the disease; therefore I am to consider whether irritation of a neighbouring but unconnected surface may not act beneficially upon a subjacent region of inflammation. Now I deny the major and dissent from the conclusion which is implied. If the scalp become tender under meningitis I presume it is because the roots of the fifth nerve, which lie at the base of the brain, are irritated by the inflammatory products or the inflammatory condition there present, whereby the branches of the same nerve which go to the scalp are made hyperæsthetic. This appears to be simple enough, but I do not see how it bears upon counter-irritation or local bloodletting. Does it afford any ground to suppose that irritation of the scalp will influence the course of meningitis? At most it displays a sensory consent between the roots and the branches of the same nerve, a condition of which we have many other examples. If, by appealing to the branches of the fifth nerve, we could influence its roots, does it follow that we should thereby lessen the inflammation around them which is the cause of the irritation, not its consequence? As well might we hope to benefit a case of renal stone by applying remedies to the tender or painful testicle.

Thus stands the case when we have an obvious and intimate nervous connexion between the surface and the position of the inflammation below; but when I try to follow further the line of thought which Dr. Gee indicates, and to follow it in the direction of the tradition of counter-irritation, there I find myself lost in mystery. Because a deep inflammation affects painfully a nearly connected surface, does it follow that irritation of a surface will affect beneficially a remotely connected deep inflammation? Here, I confess, I fail to see my way. Is there some remedial sympathy between surfaces and organs dependent on propinquity rather than anatomy, which travels across country rather than by recognised routes? Some such fancy has guided the practice of generations, and even still has its influence. Shall we continue to blister the wall of the chest as exactly over a vomica or a mass of hepatisation as our diagnosis permits or the nape of the neck for any cerebral affection, even though it permits of no diagnosis? Such things have been done. I do not know whether Dr. Gee would carry his argument to these practical issues. He does not say so; for the sake of his patients I hope not. But he has commended to my consideration facts which appear to lead him in this direction, and I cannot do less than consider them.

I am, Sirs, yours truly,

W. HOWSHIP DICKINSON.

Chesterfield-street, W., Nov. 14th, 1892.

SMALL-POX IN LEICESTER.

To the Editors of THE LANCET.

SIRS,—Your impressive note of warning in THE LANCET of last week may possibly have some effect on the minds of those who are responsible for the present state of things at Leicester. Will you allow me to accentuate your remarks by stating facts within my own experience which may be worth recording?

In 1882 the same thing happened at Nottingham as that which has just taken place at Leicester. At that time a group of wooden sheds or huts was all that Nottingham possessed for the hospital isolation of scarlet fever and small-pox, both of which diseases prevailed concurrently, and both of which were required to be notified in accordance with the provisions of a local Act of Parliament. A patient in one of the scarlet-fever huts caught small-pox. Some were of opinion that infection took place across the open space which separated the huts; by others it was considered more likely to have been the consequence of a forbidden communication between the inmates of the scarlet-fever and small-pox huts. The mode of infection, however, was not the essential point, the fact of real importance being that a person who had been removed from home to the huts in order to prevent the spread of scarlet fever had been attacked with small-pox, owing to the proximity of the disease, whilst under the care of the municipal authority. After such an experience, I could not, as medical officer of health, allow any case of scarlet fever to be treated at the huts without personally satisfying myself that, by vaccination or revaccination (according to age and other circumstances), I had effectually guarded against the recurrence of so serious an accident. The town council of Nottingham set to work soon after to improve their defences against epidemics, and they now have one of the best isolation hospitals in England. It is surprising that Leicester should be so far behindhand in 1892.

I would take this opportunity of calling attention to other sources of danger for which the authorities of Leicester ought to be fully prepared. In a community where the proportion of the unvaccinated is increasing year by year, and where notification and isolation are mainly relied on for protection against small-pox, there must always be the danger of "unrecognised cases." A person passing through the disease in a slight, modified form, and able to go about as usual, may start an epidemic. An illustration of this has occurred within my own observation. Then there are the "doubtful cases" and those of "mistaken diagnosis," which should be provided for in anticipation. In the establishment of isolation hospitals, I have of late years urged very strongly the need for a sufficient number of detached "observation wards." I am afraid that Leicester is very badly equipped in this as in other essential respects.

I am, Sirs, yours obediently,

EDWARD SEATON, M.D. Lond.

Clapham Common, S.W., Nov. 16th, 1892.

"MEDICAL AID ASSOCIATIONS."

To the Editors of THE LANCET.

SIRS,—It has been said, Why may not the public coöperate and secure medical advice at coöperative prices? I cannot for a moment admit that the practice of medicine lends itself to this so-called coöperative method, for I believe the more deliberate the attempt to identify the science and art of medicine with a trade or business the more disastrous will be the result to the public. The profession and an ordinary trade, to which modern attempts are being made to reduce it, are as different in essentials and in the handling they require as are such diverse subjects as scientific discovery and galvanised iron bucket making. The identification will destroy the essential principles of our profession—it will destroy the incentive to excel. What, it may be asked, is the use of all our sanitary legislation and efforts to prolong life and reduce sickness if side by side we allow to grow up a system opposed to the essentials of good medical practice—a system which abolishes all incentive to good practice in our practitioners, who are daily fighting with disease and death—a system which all admit cannot but tend to produce perfunctory work, which, in medicine of all things, is synonymous with bad work? Does anyone doubt that these are the real results of a system of fixed wage-paid medical service? Is it necessary to particularise when speaking to an audience of medical men?

But let us examine a little more closely what our questioner means by "coöperative," and let us not confuse coöperation with *combination*. "Coöperation" is derived from *co* and *operari*, and thus signifies conjoint labour, not a mere combination or conspiracy to secure a certain end. In its general spirit it may be described as a theory of labour, and in its general aim as an industrial force. The only indispensable labourer in a Medical Aid Association is the doctor; it is his capital, in the form of skill, and his labour which alone create the wealth. Those who do not labour or contribute to the earning have no right to share the result of another's industry, and to call such a sharing coöperation is a contradiction in terms. Coöperation seeks to make and to retain wealth by taking into partnership those who, by their labour, create it. In Medical Aid Associations there are no such labourers other than the doctor. If it be said that the committee work, it may be properly replied, It is true they hold totally unnecessary meetings, but that is not productive labour. If those retain who do not earn, the scheme ceases to have any claim to be called coöperative, but it may fairly be classed as a combination to defraud. If it be said that the goodwill is supplied by the members and that this represents the capital of the business, it may properly be replied that this exploiting of medical skill and labour for profit by lay capital is one of the fundamental abuses of the system, a reform of which is demanded. A coöperative store is a coöperation of small capitalists to employ their own capital and to run their own business, which differs from the practice of medicine inasmuch as to do so does not require a licence. By so using their own capital they save the middleman's profit, and do not make their profit by underpaying their servants for the amount of work done. The saving is effected by interest on capital employed and not by taking part of the earnings of their workers. If Medical Aid Associations do anything they create the middleman; they certainly do not abolish him.

What is the economic position of a medical man? The labour of the doctor is indirectly productive by preserving or restoring the health and consequent power of work of the productive workers. Now, there can only be coöperation in this sphere of usefulness by a combination of medical labourers working together so that all may share in the result of their industry in proportion to the amount contributed. There can be no coöperation proper between one medical man and a large number of laymen; although it is manifest there can be a combination on the part of a number of laymen to transfer to their own pockets what is fairly and justly earned by and belongs to the medical worker. To regard such a combination as coöperation is, however, altogether fallacious. A well-known author on co-operation says: "Coöperation touches no man's fortune; it seeks no plunder; it causes no disturbance in society; it subverts no order; it has its hand in no man's pocket. It seeks its ends by means which leave every other person an equal chance of the same good." Let us see how this fits Medical Aid Associations. Now, in these businesses a profit may be

made in either of two ways: (1) the direct trade profit on the conduct of the business, or (2) the indirect, but not the less real, "saving" profit accruing to the individual members. This indirect profit is to be estimated by the money saved in fees as the result of the combination. For example, a man who is perfectly well able to pay and who does not deny his ability to pay the ordinary and fair charges of his medical adviser joins a Medical Aid Association. For an annual payment of 3s. 6d. he receives what formerly cost him £10. He is pecuniarily benefited to the extent of £9 16s. 6d. a year. But is this a defensible proceeding? Is this an allowable combination? Are the medical men to be condemned for protesting against what is, having regard to the foregoing considerations, clearly a robbery, even though effected under the cloak of a combination or association miscalled coöperative? A builder and contractor recently said: "What I formerly paid my doctor for one visit now pays my medical bill for a whole year." This kind of robbery is going on to a perfectly incredible extent at the present time. It is not denied that it is so; on the contrary, it is admitted, and it is openly claimed that the proceeding is legitimate. Let us imagine for a moment a parallel in the "Law." There are 100 wealthy men, each of whom pays to his respective solicitor charges for conveyancing and other professional work amounting to £100 a year. They combine, or, if the word is preferred, coöperate. They engage a solicitor as their wage-paid controlled servant and pay him a salary of £300 a year. Each of the hundred wealthy men contributes £3. What is the result of this pretty combination? The laymen save in the aggregate £9700. In other words, they have transferred to their own pockets £9700 which properly belongs to the legal profession. The profession is poorer by so much; while those who could well afford to pay, and for whom that amount of work has been done, have by their illicit and indefensible combination become so much the richer. The solicitor has been underpaid, having regard to the amount and value of the work done. Shall we call this coöperation? No; it is an illicit combination to indirectly enjoy the pecuniary benefits of a licence not possessed; for, as I have previously shown, the privilege of making a pecuniary profit out of the practice of law or medicine belongs exclusively to the licence, and without the licence the privilege does not exist. What would the Incorporated Law Society say to all this? That authority would say exactly what, I have no doubt, the General Medical Council will say to the analogous position in medicine: "This cannot be."

Here once more let me tell the tale of Stourport, for it well demonstrates this illicit combination to rob the doctors of their legitimate remuneration. The population of Stourport is 3504. The total number of members of the Medical Aid Association is 3177. That the scheme has but little of the friendly societies' element in it, of which we have heard so much, is shown by the fact that the club members number 591, while the public members amount to 2526. In other words, after providing for the medical wants of the members of the friendly societies, 2526 persons have combined to transfer to their own pockets (by saving) what fairly and honestly belongs to the medical profession. And who are these 2526 persons? In the Association there are or have been all the Dissenting ministers, one solicitor, four members of the local board, nine-tenths of the publicans and hotel-keepers, 50 per cent. of the tradesmen (including several large drapery houses), two jewellers, several butchers (some of these have their villa residences outside the town), all the coal merchants, many owners of house property, a large proportion of the farmers (many of them farm hundreds of acres—one as much as 1000 acres), and several estate owners.

In the Kidderminster Medical Aid Association there are 2272 club members and 2367 public members; in the Luton Friendly Societies' Medical Institute the club members contribute £322, while the public members' contributions yielded £512. These three examples—Stourport, Kidderminster and Luton—demonstrate a great abuse constituted by the departure from the original intention of Medical Aid Associations. They have developed from amalgamated clubs to immense private practices, the profits of which, either directly or indirectly, pass into the pockets of the unlicensed laity instead of into the pockets of the licensed practitioners who earn them.

I am, Sirs, yours truly,

LESLIE PHILLIPS,

Birmingham, Nov. 5th, 1892. Hon. Sec., Medical Defence Union.

To the Editors of THE LANCET.

SIRS,—I am an old "Association" surgeon, but until reading the letter of "Verax" was unaware that any Utopia such as he seems to be dreaming of existed among the so-called "Medical Aid Societies." My experience, as likewise that of the many still under "the thrall of the committee" who write to the medical and lay journals, reduces the remarks of "Verax" to absurdity. The work in a "flourishing business" such as ours was is prodigious and altogether out of proportion to the salary—indeed, beyond the conception of the hardest-worked general practitioner. He is a lucky "Association" doctor who, in the stress of winter work or epidemic—influenza, to wit—has not to dip deeply into his meagre salary for "extra" cab hire; for, Sirs, we are dealing with patients far more exacting than those who pay a reasonable fee for attendance. When sent for, tired though we be both mentally and physically, we must go without murmur or be reported for negligence, and in due course "hustled" by the committee, who, generally speaking, have less knowledge of the feelings of a gentleman than we have of the canals in Mars. There is an old saying—and, like most of them, it is true—that "a man has either made or missed his mark at forty." In this category must be included those individuals of "mature years" who accept salaries of £50 or £70 per annum (in-door). When such as these apply there is a "screw loose." Short comment only is needed upon the remarks as to a "locum" holding a death vacancy for a time &c., as likewise those referring to "medical aids" taking patients from other practitioners—they stultify themselves. Reference is made by "Verax" to an association where a question arose as to an increase in salary of the medical officer after five years' service. Now, Sirs, from your leading article of the 15th inst., this can clearly apply to one town only, and having in view the pathetic platitudes of "Verax" as to his "injured feelings," caused by the said article, would it not have been more seemly and courteous had he made himself master of the facts (an easy matter, by the way) and surmised less as to the "market value" (save the mark!) of the services of the medical officer so directly indicated, whose susceptibilities may be as keen and feelings as "nice" as his own? The whole tone of "Verax's" letter makes one pause and think, Is it not a peripatetic pandering to a committee with which he is a trifle "off colour"? If so, I would advise him to be as I used to be with that under which I worked—

Oct. 25th, 1892. "AUT CÆSAR, AUT NULLUS."

To the Editors of THE LANCET.

SIRS,—I would like to ask "Verax" if he considers the following description of how the midwifery department of the company's business is managed is conducive to professional dignity, or tends to elevate the public morals:—"The members' wives can secure the services of the Company's medical officer on payment of 10s. 6d. to the secretary." I presume that as the medical officer is not in any way consulted, the secretary obtains particulars on various delicate points. If it is found that the company's business in this department is at all slack, one of the committee is instructed to canvass the district, and invite the ladies to engage the services of their able medical officer, who being a married man with a large family, has considerable experience in this particular department. What I have detailed actually takes place.

I am, Sirs, yours truly,

Nov. 7th, 1892. L.R.C.P. Lond.

"AMPUTATION FOR DIABETIC GANGRENE."

To the Editors of THE LANCET.

SIRS,—In your issue of Nov. 5th Mr. T. Davies Pryce refers to my paper on the above subject, read before the Royal Medical and Chirurgical Society on Oct. 25th, and draws attention to the fact that both atheroma of vessels and peripheral neuritis may be present in a case of diabetic gangrene, and may, apparently, both have something to do with its causation. I have no doubt that he is correct, and, indeed, endeavoured to bring out this point in my paper, but unfortunately omitted to do so in the abstract sent to the journals. I do not think that the presence of both these conditions need necessarily

be looked upon as an absolute contraindication to amputation, but rather that, whilst the presence of arterial degeneration makes the case much less promising, that of peripheral neuritis has not much to say to the matter. Gangrene starting from a perforating ulcer is a much more dangerous affection if the vessels be sclerosed than if they be healthy, but senile gangrene in a diabetic is not a more serious affection in a man with peripheral neuritis than in one without it.

I am, Sirs, yours faithfully,

RICKMAN J. GODLEE, F.R.C.S. Eng.

Wimpole-street, W., Nov. 11th, 1892.

THE CLIFTON LUNACY CASE: MASON *v.* MARSHALL AND SHAW.

To the Editors of THE LANCET.

SIRS,—Upwards of four years ago you were kind enough to open your columns for a subscription-list towards defraying the expenses of Dr. Shaw and myself in defending the lunacy certificate action brought against us by Miss Mason. The result of the trial, your readers may remember, was a verdict with costs in our favour. At the time there appeared to be no probability of our obtaining costs; recently, however, they have been recovered, with the result that we have now a balance in our favour. My own legal expenses came to £304 13*s.* 6*d.* the taxed costs now recovered to £221 19*s.* 7*d.*, thereby reducing my legal expenses to £83 13*s.* 11*d.* From the treasurer (Dr. E. Long Fox) of the fund contributed by the medical profession I received £155 2*s.* 9*d.*, which places a balance of £71 8*s.* 10*d.* at my disposal. I have been anxiously considering how best to apply this surplus amount in a way likely to prove most in accordance with the feelings and wishes of the donors to the fund, and, after consultation with Dr. Fox as their official representative and with other friends, I have decided to send a contribution of £100 to the Library of the Bristol Medical School. I trust that this will meet with the approval of those of my professional brethren who showed me so much sympathy, and gave such practical assistance at a time of great anxiety. The recollection of this sympathy and kindness remains gratefully and indelibly fixed in my memory, while the worries and vexations attendant on the trial are forgotten. Thanking you, Sirs, for your support, I remain, Sirs, your obedient servant,

Clifton, Nov. 14th, 1892. HENRY MARSHALL, M.D. Edin.

To the Editors of THE LANCET.

SIRS,—As a codicil to the letter from Dr. H. Marshall, will you allow me to add that, having also recovered my taxed costs from the plaintiff in the action brought against us, I have now received from all sources a surplus beyond my original expenses. With exceeding pleasure I have made a donation of £100 to the library of the new Bristol Medical School, and the small balance still remaining I am spending upon my wards in the Bristol Royal Infirmary. Deeply and increasingly grateful for the sympathy shown us at the time, it would not be honourable to profit by the generosity of our professional brethren, and I gladly, therefore, contribute to the equipment of an institution which at this moment is an appropriate object of pecuniary support.

I am, Sirs, yours faithfully,

Bristol, Nov. 16th, 1892. J. E. SHAW.

"THE RADICAL CURE OF FEMORAL HERNIA."

To the Editors of THE LANCET.

SIRS,—I have read with much interest Mr. Watson Cheyne's paper on the Radical Cure of Hernia published in THE LANCET of Nov. 5th. Since the autumn of 1888 I have performed the operation for the radical cure of femoral hernia as described by Mr. Watson Cheyne, with the exception that I have not thought it necessary to dissect up the whole thickness of the pectineus muscle, contenting myself with the pectineus fascia and a portion of the underlying muscle, the amount depending on the thickness and strength of the fascial covering. I was led to adopt this method for the same reasons which influenced Mr. Watson Cheyne, and I have now operated on four patients. Three of them did perfectly well and did not require a truss or pad after the operation. My fourth case (October, 1892) was one of strangulation of five days' duration. The gut was very congested, but not gangrenous. I took only a thin layer of muscle, and perhaps fortunately so, since the wound, which had healed by first intention under one dressing, broke down again about the tenth day and a small faecal fistula was formed. The operation is sound in principle, presents no difficulties in performance and gives an excellent result. I am, Sirs, yours faithfully,

Harley-street, Nov. 10th, 1892. C. STONHAM, F.R.C.S. Eng.

FOREIGN BODIES IN THE BLADDER AND INDIAN SUPERSTITIONS.

To the Editors of THE LANCET.

SIRS,—Surgeon-Major D. Davidson, civil surgeon of Satara, a short time ago, in communicating an unusual case of vesical calculus to THE LANCET, stated that the nucleus was formed of a small doubled-up twig, and added that he could not clearly ascertain how or why the foreign body had been introduced into the bladder. A few days ago I had a man under my care whose case may throw some light upon the subject. I removed a stone, weighing upwards of two ounces, from the bladder of the patient, a Jogi, in which the concretion had formed round a small piece of "amar-bel" (a species of viscum), a parasitic plant, with fine, smooth stems, which infests certain trees, and is, as its name, "the deathless creeper," would perhaps seem to indicate, regarded as being possessed of special virtues. The Jogi, or Yogi, is one who attempts to attain union with the Supreme Being by means of abstract contemplation. My patient explained that he was accustomed to cleanse his urethra with a piece of the "amar-bel" stem in order that he might fit it for the last passage of his soul out of the body in a state of purity, so as to avoid the necessity of another—or at least of a lower—birth, and that two years ago it had slipped back into the bladder. It is thought by Hindu Yog philosophers that the soul leaves the body by one or more of ten outlets (*dash-dwár*), of which the eyes, ears, and fontanelles are pure, and the nostrils, mouth, anus, and urethra are impure. Sometimes, if there be a discharge from any of the impure passages at the time of death, the soul may take its exit by them and thus become defiled and takes a lower birth, hence the Jogi tries during life to minimise the evil by cleansing every road as much as possible. The modes of effecting this are described in various works, and some are remarkably curious. I am informed by a very enlightened Rajput noble that warriors do not take opium before going into action in order to acquire a little spurious courage, as some have supposed, but to induce constipation, so that, if fatally wounded, the sphincters may not be relaxed, and thus the soul may pass away by an upper exit. It is true that Krishna said to Arjuna in the Bhagavat Gita that one who was killed in battle would go to heaven, but it is as well to make sure of a safe journey for the soul a Hindu thinks. In judicial death by hanging there is of course the prospect of the soul having to leave the body by an objectionable channel, but in addition there is the certainty that the prisoner does not die on the earth and so his spirit becomes a pisach, a chut or demon. This explains what always seems to the spectator the unfeeling action of the friends of a Hindu when he is on his deathbed at which time they always place him on the ground in order that he may expire there.

I am, Sirs, yours faithfully,

T. H. HENDLEY, Surg.-Lt.-Col., C.I.E.,

Jeypore, India, Oct. 25th, 1892. Residency Surgeon.

"THE ETHICS OF OPIUM AND ALCOHOL."

To the Editors of THE LANCET.

SIRS,—Let me give, without comment and very briefly, with reference to the discussion on the opium habit generally and of Dr. Mount's extenuation of the practice in particular, at p. 1090 of THE LANCET of Nov. 12th, some experience of mine and of other medical officers during the China campaign of 1860 of the force engaged in which Probyn's and Fane's irregular cavalry formed a part. These splendid native horsemen were habitual indulgers in that narcotic, and as no provision had been made by the commissariat in

China for its issue as an ordinary ration the men were rendered quite incapable of military or any other duty, even of cleaning their horses, by its suppression. No opium being at hand, commissariat "indents" were made to the Medical Department for a provisional supply in quantities that were so excessive as very soon went far to exhaust the store. As soon as the opium ration was served out the temporary disability immediately disappeared. It is to be presumed that the consumption of the drug by these native troopers was comparatively moderate. They certainly were what Dr. Mouat terms as a class exceptionally bright and intelligent, "with broad frames, brawny muscles, pliant skins," and in every way unusually active and efficient soldiers. Yet their collapse on the cessation of the stimulant seems clearly to prove that, under the most favourable circumstances, the opium habit is injurious in a high degree to the nervous system and ought to be discouraged, in spite of fiscal and all other considerations, by any truly scientific code of preventive State medicine.

I am, Sirs, yours obediently,
R. LEWINS, M.D. Heidelb.,
Nov. 14th, 1892. Surgeon-Lieutenant-Colonel (Retired).

DIPHTHERIA AND SEWER GAS.

To the Editors of THE LANCET.

SIRS,—Your reviewer of the recent "Treatise on Hygiene and Public Health" calls attention to a point of great importance, especially at the present time, when diphtheria is more prevalent in London than ever before. Is there a causal relation between sewer gas and diphtheria? As your reviewer says, some noted authorities say no. On the other hand, many say yes, besides Professor Notter; among them Drs. Thorne Thorne, Thursfield, Sykes, and Mr. M. Adams (see "Epidemics, Plagues, and Fevers"). I have been recently led to suspect manhole ventilators as a cause of diphtheria in this parish; and it has occurred to me whether the increase of diphtheria in London in recent years may not be partly accounted for by the increased ventilation of sewers—i.e., ventilation which allows the escape of sewer gas in improper places, without being sufficient to render it innocuous It would be interesting if any who have studied this question would give their experience, and I should be much obliged for reference to any literature on the subject.

I am, Sirs, yours truly,
SIDNEY DAVIES, M.D.Oxon., D.P.H.Camb.,
Nov. 15th, 1892. M.O.H., Plumstead.

"ARREST OF HÆMORRHAGE AFTER TOOTH EXTRACTION BY HOT WATER."

To the Editors of THE LANCET.

SIRS,—Your annotation on the above subject leads me to think that the following illustrative case may be of interest to your readers. In April, 1891, while acting as "locum tenens" at Freshford, I extracted a tooth from a young woman. There was some bleeding at the time, but it had ceased before she went away. It soon recurred, however, and during the next three days she lost, at intervals, a large quantity of blood. The cavity was plugged several times by Dr. Flemming and by myself. Each time we succeeded in stopping the hæmorrhage, but it always recurred whenever the patient removed the plug, so that we were frequently being sent for. Finally, I decided to try syringing with hot water. I used water as hot as I could bear to put my hand into. Immediately on the first impact of the hot water the bleeding ceased. I desisted at once, but the oozing soon recommenced. I then syringed continuously for some four or five minutes. The hæmorrhage ceased, the gum became pale and eventually completely blanched. There was never any recurrence after this. The patient complained of no pain, no sloughing followed, nor were there unpleasant after-results of any kind.—I am, Sirs, yours faithfully,

H. WILLOUGHBY GARDNER, M.D.Lond.
Shrewsbury, Nov. 15th, 1892.

"ELECTROPATHIC ADVERTISING."

To the Editors of THE LANCET.

SIRS,—I beg to inform you that I have commenced an action for libel against the newspapers to whose article you refer in your annotation on "Electropathic Advertising" in your issue of Sept. 24th, and I shall also hold you responsible. I request you to insert this letter in your next issue.

I am, Sirs, your obedient servant,
HERBERT TIBBITS, M.D., F.R.C.P. Edin., &c.
Welbeck-street, W., Nov. 14th, 1892.

CHOLERA AND THE GERM THEORY: A CRUCIAL TEST.

To the Editors of THE LANCET.

SIRS,—We have been recently informed that the Imperial Cholera Commission in Germany (a country which supplies us with such numerous therapeutic surprises) states that "wine—claret or hock—was found to kill the bacilli [of cholera] in a few minutes." Hitherto, when it was pointed out that in no single instance had the germ theory borne fruit in the treatment of disease, the excuse was pleaded that such agencies as destroyed the bacilli had an inimical effect on the system, and could not therefore be administered as remedies. Now here, according to this Imperial Commission, we have a totally different case. If cholera be due, as in Scotland we have been recently assured by Dr. Grainger Stewart, and as we are constantly being assured through all the medical journals at home and abroad, to the comma bacillus, and if claret or hock kills the comma bacillus in a few minutes, then claret and hock ought surely to cure cholera; here there can be no excuse that these beverages act as poisons to the system. Tea also, according to the same authority, killed the bacilli in one hour. If the Imperial Commission be right, and if the bacillary theory of disease be well founded, I submit that the cure of cholera should now be *un fait accompli*. If it be nonsense, as I believe it to be, then here we have another instance of the inanity of the whole thing. If, again, cholera be due to the presence of the comma bacillus in the bowels, why use tannin injections as recommended by Alexinsky of Jarsolaol (whoever he may be) and Professor Cantani of Naples, or why use astringents by the mouth? Would not purgatives to expel the bacillus be indicated? What with Dr. Brown-Séquard's "organic injection," injections of the juice of the thyroid gland, and of the serum of dogs and horses, truly the "science" of therapeutics may be said to be in a bad way.—I am, Sirs, your faithfully,

Glasgow, Nov. 11th, 1892. D. CAMPBELL BLACK, M.D. Glas.

"AN ACCIDENT UNDER CHLOROFORM."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of the 1st inst. I find a note on "An Accident under Chloroform" by Surgeon-Lieutenant-Colonel Lawrie. I think this is the first accident of the kind ever recorded as having taken place in Surgeon-Lieutenant-Colonel Lawrie's practice of some scores of thousands of cases of chloroform administration. It is strange that it should have occurred after so much experiment, and so much assertion that if chloroform were only always administered everywhere according to the Hyderabad method its use would always be absolutely safe. If, however, such an accident can occur when the drug is administered under Surgeon-Lieutenant-Colonel Lawrie's personal supervision, and by one of his own students, it is clear either that the supposed safety of the drug has been exaggerated or that there are other reasons for its undoubted safety as administered in India compared with the conditions which obtain in England and in temperate and cold countries generally. Here in Madras, we have never had a death from chloroform, but we have had occasionally an "accident" similar to that described by Surgeon-Lieutenant-Colonel Lawrie, and in which a fatal issue has been averted by artificial respiration. My experience, as also that of Surgeon-Lieutenant-Colonel Lawrie, is very limited in regard to the administration of anæsthetics at home; and so I speak under correction when I say that if there is anything more puzzling than the safety of chloroform in India as compared with England, it is the extreme readiness with which apparently asphyxiated patients respond to artificial respiration here as compared with England.

I am convinced that our pure freely circulating air (for all operations are practically done in the open air); the dilute form in which the chloroform is necessarily administered owing to the high temperature of the atmosphere; the constitutional peculiarities of our patients, the result of dif-

ference in food, clothing, and temperate habits—I say I am convinced that these different conditions have a great deal more to do in rendering chloroform anæsthesia safe here than any particular difference in the methods we adopt. In regard to the matter of temperance alone, every surgeon in India knows how differently intemperate patients act under chloroform from the usual temperate individuals he has to deal with. We readily notice the difference here because the intemperate are as yet few and far between. Again, our patients never "funk" chloroform as Europeans constantly do. Surgeon-Lieutenant-Colonel Lawrie, in a late paper of his, has stated that till Hyderabad methods were introduced the patients used to bolt the moment they saw the chroroform bottle. English readers must take this statement as referring to Hyderabad alone. I venture to say there is not another surgeon in India who has had a like experience. Our patients as a rule simply cry out for chloroform for the most trifling operations. I have been watching this closely for the past ten years, and it has always been the same. So the fact is they do not fear it; the air is pure and warm; they are temperate, rarely muscular to the European degree, rarely bilious from over-feeding with loaded bowels, and always practically naked—everything in fact as favourable as can be for the ready reception and equally ready elimination of a volatile drug like chloroform. Surgeon-Lieutenant-Colonel Lawrie seems to approve of holding down a struggling patient. I think this approval is ill-advised. If the patient struggles and his movements are forcibly and completely restrained he closes his glottis that he may the better resist opposition, and elimination of the chloroform in his blood is thereby effectually arrested. Our custom here is to allow a patient's arms to swing about freely and to restrain only partially all other movements. He is simply prevented from removing the chloroform cap from his face, an attempt he is sure to make when becoming unconscious. I have come to regard this point as of some importance.

I am, Sirs, faithfully yours,

Oct. 22nd, 1892. SOUTH INDIA.

"FELIXSTOWE SPA."

To the Editors of THE LANCET.

SIRS,—In the current issue of THE LANCET Dr. Jones gives a glowing account of the charms, and especially of the sanitary perfection, of Felixstowe. Oddly enough, however, he does not mention its system of sewerage. Is this because he hesitates to speak evil of the absent?

I am, Sirs, yours faithfully,

Nov. 14th, 1892. GOLFER.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Sad Boating Fatality on the Tyne; a Medical Student Drowned.

ON Saturday evening last a sad boating fatality took place on the Tyne, whereby a student at the Medical College and a resident dresser at the infirmary lost his life. The facts are shortly as follow: Mr. Benjamin May and companions hired a four-oared outrigger to have a little exercise on the river, and all went well until about six o'clock, when the evening getting very dark the boat collided with a Blaydon steamer and all the rowers were upset into the river. They contrived to swim to the bank with the exception of Mr. May, who was missed, and although his companions made desperate efforts to reach him his body was not found until the following day, when it was recovered and taken to the infirmary, where it lies until interment to-day. Mr. May, who was in his twenty-first year and had nearly completed his curriculum, was distinguished as a student and carried off many prizes during his course. His remains were followed by professors, lecturers, and infirmary officials, and by nearly everyone of his sorrowful fellow-students, by whom he was held in the highest esteem.

Proposed Temporary Hospital for Cholera on Newcastle Town Moor.

The sanitary and other committees concerned in the erection of a cholera hospital on the Town Moor have under their consideration a proposal to lay down concrete foundations and to put in the necessary sewers so that in case of a visitation of cholera emergency temporary hospitals could be promptly erected on the enclosed sites of about one and a half acres.

Dr. Maclaren of Carlisle on Alpine Climbing.

Dr Maclaren of Carlisle, who has been in the habit of visiting Switzerland for some years past and has therefore some experience of the pleasures and dangers associated with Alpine climbing, gave an attractive and most interesting lecture on the subject last week in the Viaduct Hall, Carlisle. He thought if all people who were still young would pay two or three visits to Switzerland they would be well repaid in health, and the general interest in nature which would be aroused. Young men, he said, used to cricket and football might commence to climb at once. Three or four could join together with one guide (a guide, though not always necessary, was advisable, and well repaid expense).

Tobacco and Snuff for Workhouse Inmates.

The Lanchester board of guardians, in reference to the circular of the Local Government Board authorising an allowance of tobacco and snuff to non-able-bodied paupers, have represented to the Local Government Board that it might withdraw the term "non-able-bodied paupers," and leave it to the discretion of the master to recommend these luxuries under certain circumstances to working inmates. Old men and women smokers were to be allowed two ounces per week.

Miscellaneous Items.

The Gateshead guardians have resolved in consequence of the congested state of the County Lunatic Asylum to appoint a committee to consider the necessity and advantage of establishing an asylum on the guardians' land for the reception of the lunatics of the union. From this and other indications apparent in the same direction it appears to me that the day for huge lunatic asylums is over; at all events, that they have now reached their limit in the north.—Last week an interesting presentation took place at the Central Hall, Spennymoor, of a purse of gold and a medal suitably engraved with an illuminated address to Police-constable R. Boal, who discovered the fire at the North-Eastern Hotel and gallantly saved the lives of the inmates.—A Local Government inquiry has been held at Eston, near Middlesbrough, to sanction the purchase of land for a sanatorium for the district, to which there was no opposition.—Mr. Veitch of Middlesbrough has presented to the museum of that town a stone axe head which had been dredged in the River Tees. It is said to be a very fine relic of the stone age.—One of the events of the week has been the reopening of the Newcastle Art Gallery with a brilliant conversazione, which was attended by the mayor and corporation and our principal citizens. The Newcastle Art Gallery is something unique, for under the same roof it includes the magnificent picture galleries, a concert hall and various club rooms, besides separate rooms large enough for the meetings of our various scientific societies. There has been a great need for this in Newcastle, as we have nothing in the way of a medical institute.—In my last notes I mentioned that the seal had been driven from its haunts on the Northumbrian coast by the steamboat traffic. I have been sorry to hear, however, that on Saturday last a boat proceeded to the Seal Rock (one of the Farne Islands) in search of a female seal and her cub which were seen on the rock. They escaped. Not so a fine bull seal, which the fishermen shot. It is said to weigh forty-five stone, and the skin measures eight feet by five feet.

Newcastle-on-Tyne, Nov. 16th.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

Royal College of Surgeons.

AN election for a Member of Council in the room of Mr. J. Kellock Barton, resigned, was held on Monday, when Dr. F. T. Heuston, Professor of Anatomy in the Medical Schools of the College, was elected by a large majority.

Graduates' Memorial Building: Trinity College.

A sum of £6500 has already been received for the Graduates' Memorial of the Tercentenary of the University of Dublin, and it is confidently expected that before the year terminates an additional £500 will be added to the amount. The governing authorities of the University have consented to give a suitable site for the proposed building, and the matter will soon engage their consideration.

Dublin Hospital Sunday.

The nineteenth annual collection in aid of the Dublin

hospitals took place last Sunday, and, so far as can be ascertained, it is believed that the returns will prove satisfactory. The hospitals aided by the fund receive annually upwards of 11,000 patients, attend 4500 lying-in women at their own homes, treat as extern patients more than 15,000 accidents, and relieve many thousands at their dispensaries. They contain about 1200 beds, many of which, however, cannot be utilised for want of funds. The work done by these hospitals costs some £43,000 yearly, of which about 10 per cent. is supplied by the Hospital Sunday Fund.

Richmond Lunatic Asylum.

Last year there were about 300 inmates of this establishment over the estimated accommodation, and the hygienic condition, the inspectors of asylums assert, remains unsatisfactory, as shown by the frequent occurrence of dysentery and other forms of zymotic disease. The governors have at last decided to obtain an estate in the neighbourhood of Dublin, and there erect a second asylum for the district. There is little doubt that, before long, it will be found more convenient for the counties of Dublin, Louth, and Wicklow to separate from the city of Dublin, as the patients belonging to the metropolis are increasing with such rapidity as to render it likely that a separate institution will be found essential for their treatment, but in the meantime the scheme adopted by the governors has the advantage of presenting the fewest difficulties. Not alone is the Richmond Lunatic Asylum overcrowded, but the workhouses situated in Dublin contain a large number of persons of unsound mind for whose care and accommodation more suitable surroundings are required. Considering the number of the insane in this district who require asylum care, a second institution affording equal accommodation to the existing Richmond Asylum will be required.

Cork South Infirmary: Lady Students.

At the monthly meeting of the trustees of the South Infirmary, Cork, held on the 11th inst., a motion by Colonel Donegan to rescind a resolution passed by the trustees at a previous meeting, permitting lady students to attend clinical instruction in the hospital. After considerable discussion the motion was lost by 14 votes to 5.

Cork Hospital Saturday.

Cork has done better than in 1891 by about £100. The street collections and private donations amounted to nearly £800, which is encouraging.

National Registration of Plumbers.

The general meeting of the members of this association was held recently. Professor Anthony Roche, in seconding one of the motions, said that he considered their Association one of the greatest possible importance from a sanitary point of view. Dr. McWeeney and Sir Charles Cameron also spoke. The latter said the association was not a trades union, but was for the purpose of protecting the public on the score of health, for the public ought to be protected against incompetent persons calling themselves plumbers who were not able to discharge the duties which they undertook. The law said that no one could officiate as a medical man unless his name was on the Medical Register, and he could not be put on the Register unless he could produce evidence as to his competency. This was all they required with this Registration Association.

Royal Hospital for Incurables.

At a meeting of the governors held last Monday, Mr. Wm. Russell, L.R.C.S.I., was elected Resident Medical Officer. Mr. Russell was recently resident medical officer of Monkstown Hospital.

The following have been placed on the Commission of the Peace :—Wm. Kerr, M.D., for Armagh; Richard Harold, M.R.C.S. &c., Castleisland, for Kerry; and James Kilbride, L.R.C.P.I., M.R.C.S. &c., Athy, for Kildare.

Nov. 15th, 1892.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Electricity and Diagnosis in Gynæcology.

AT a recent meeting of the Société Française d'Electrothérapie M. Apostoli, whose name is so largely associated with the use of electricity in gynæcological practice, read a paper on some New Points in the Uses of Electricity in Diagnosis in Gynæcology. Electricity, he held, was not only of undoubted benefit in uterine therapeutics, but it was also a great aid in gynæcological diagnosis.

Alcoholism in Switzerland.

According to the official returns for the year 1891, out of a total of 6885 deaths of persons over twenty years of age in the fifteen most populous towns of Switzerland, 425 were due to alcoholism—in other terms, 6 per cent. Of these 425 deaths owing to this sad cause 366 were men and 59 women. Of 366 individuals who succumbed to this vice 188 belonged to the working-class category and 178 to the superior, or educated, classes, which proves—when the relative proportion of these two classes in the social scale is taken into consideration—that alcoholism is more frequent in cultivated society. It is worthy of note that the fifteen centres which are included in this statistical computation form only the sixth part of the total population: so that if the figures 425 be multiplied by 6 it is found that the number of deaths due to alcoholic vice in 1891 in the Helvetic Confederation amounts to the respectable, or rather disreputable, figure of 2550. Let those who will, then, take comfort in the poor consolation that the United Kingdom is not the only part of the world afflicted with what has been not inaptly termed the "English disease."

Hygiene in Schools.

The science of hygiene bids fair to become popularised in France. The strides that this branch of preventive medicine has made in this country within the last few years are indeed considerable when the conditions existing under what may be termed the not very distant pre-hygienic epoch are considered. M. Strauss, a municipal councillor, proposes to create a municipal chair of School Hygiene destined to give instruction in this subject to the teachers in the municipal schools. The future municipal professor of hygiene will be elected, after a public competition, from the medical inspectors of schools of the city of Paris.

Paris, Nov. 16th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Dr. S. Guttmann on the Recent Cholera Epidemic.

AT a meeting of the Society for Internal Medicine, on the 7th inst., Dr. S. Guttmann spoke on the course taken by the last cholera epidemic. He said that the pestilence had taken its usual course from its home at the mouths of the Ganges and the Brahmapootra westwards to Russia. As usual, before spreading to Europe, it had raged with more than wonted fury in the basin of the Ganges. How it had got to Paris, however, had not yet been cleared up, but one must remember that the journey from Bombay to Paris took only about eighteen days. In Paris the outbreak of cholera had long been kept secret. In spite of the unambiguous results of microscopic examination, Professor Peter had maintained only the other day that the Paris epidemic was not Asiatic cholera. On the pretence that it was cholera nostras, all precautions had been neglected at first in Paris. The suburbs on the Seine below Paris had suffered most, the river there containing all the filth that the big city poured into it. A correspondence which he (Dr. Guttmann) had had with the sanitary authorities of Antwerp proved that the cholera cases which occurred in that city were directly traceable to Paris and its environs. This being so, he thought it quite certain that Hamburg got the contagion from Antwerp, Paris, or Marseilles. The Hamburg epidemic had taught with terrible emphasis what an important part drinking-water may play in spreading cholera. The importance of other hygienic conditions had also been shown by the circumstance that, in direct contrast with what had happened in France, severe as the Hamburg epidemic had been, new cholera foci had nowhere been formed in Germany, a fact which had also struck French medical men. Dr. Guttmann threw some light on the history of the dispute between the localists and contagionists, and concluded by describing how the knowledge of cholera had been deepened and extended by Koch's discovery of the germ of the disease.

Treatment of Fractures of the Leg.

At a meeting of the Society of the Charité Doctors on the 10th instant, Dr. Korsch of the 12th Grenadiers, assistant in Professor Bardeleben's ward in the Charité, delivered a lecture on the treatment of fractures of the legs by so-called ambulatory bandages. The method is not new. It was invented by a trussmaker at Göggingen named

Hessing, who furnishes patients in whom a false joint has formed at the place of fracture with an apparatus which enables them to walk about without inconvenience. The making of this apparatus, however, demands a several weeks' stay at Göggingen, and it is so dear that only rich people can buy it. Dr. Korsch has now proved that one can enable patients with fractures of the tibia or fibula, or of the ankle, to walk about by the much simpler means of a plaster-of-paris bandage. He has extended the application of the method to cases in which not only the bones, but also the soft parts covering them, are injured, and to fractures of the femur. In the latter cases he supplements the bandage by a splint, which can be improvised by any locksmith out of telegraph-wire and hoop-iron, or, if the latter cannot be got, sheet-metal.

Miscellaneous News.

Professor Hirsch of Berlin has finished his "History of the Medical Sciences," at which he has been working for years.

The work of the Imperial Office of Health has grown to such dimensions that its present premises have become too small for it, and a new building is to be erected.

Herr Schloski, director of the street-cleaning department in Berlin, and Dr. Weil, who were sent by the magistrates of this city to London to study the burning of house-refuse there, have now reported, and the magistrates have resolved to instruct the building department to draw up a plan of a destructor and an estimate of its cost.

The death-rate of Hamburg and its environs for the week which ended on Oct. 29th was only 17·7.

The friends of Hermann von Helmholtz have collected and published the speeches which were delivered at the celebration of his seventieth birthday.

Berlin, Nov. 15th.

Obituary.

EDWARD COCK, J.P., F.R.C.S.

(CONSULTING SURGEON TO GUY'S HOSPITAL).

ON Aug. 1st, at the great age of eighty-seven, this eminent and popular surgeon died at Kingston-on-Thames, where he had resided for thirty-two years. He had given up hospital work for twenty-one years, but he might have been seen up to the last six or seven years coming up to his house in Dean-street, St. Thomas-street, S.E., daily for private consultations. His professional opinion was much valued by a large circle of friends, and his personal qualifications endeared him to all who came under their influence. "Teddy Cock's" last tale was always popular with Guy's men, and his cheery voice had a friendly ring in it which was acceptable. Edward Cock was born at Tottenham, where his parents resided. His family was related to the Clines. Sir Astley Cooper, who married Mr. Cock's aunt (his father's sister), in the early part of his career was a frequent visitor and inmate of his grandfather's and father's house (frequent mention of this will be found in the Life of Sir Astley Cooper, by Mr. Bransby Cooper). At the age of sixteen Mr. Cock was bound apprentice to Sir Astley Cooper and commenced his anatomical studies at St. Thomas's Hospital, where, as the two Borough hospitals were then united, the surgical and anatomical department of the school was carried on. The warmest feelings of mutual esteem and friendship always existed between the illustrious master and his pupil, and only ceased with the death of the former in 1841. A few years witnessed the separation of the two hospitals and the establishment of a new and distinct school at Guy's. These events naturally drew Mr. Cock to the place which was to be considered his home and *alma mater*, and where his illustrious uncle still continued to fill the post of surgeon. Mr. Cock took an active part in the arrangements for the new school and worked hard at the formation of an anatomical museum. When the school opened in 1826, although still an apprentice, he undertook the duties of Demonstrator of Anatomy. From that time, during the succeeding twenty years, he continued to teach anatomy in connexion with Mr. Bransby Cooper, and subsequently with Mr. Hilton, and only resigned his appointment into younger hands when the duties of hospital surgeon and his increasing private practice, added to the wear and tear of lecturing, began to undermine his health. On his relinquishment of the anatomical chair the former pupils of the hospital who had studied anatomy under his tuition availed themselves of the opportunity to present him with a handsome piece of plate. Mr. Cock became a member of the College of Surgeons in the year 1828, and an Honorary Fellow amongst the first batch created in 1843. He was elected a member of the Council of the College in 1856, a member of the Court of Examiners in 1867, and President of the College in 1869. In 1838 he was appointed assistant surgeon to Guy's Hospital; but for some years previously the engagements of Mr. Aston Key and the absence of Mr. Morgan, who lived out of town, had thrown upon him the active duties of hospital practice and afforded him frequent opportunity of performing many of the operations of surgery.

In the year 1847, on the decease of Mr. Morgan, he became full surgeon; the subsequent death of Mr. Aston Key in 1849 placed him in the position of second surgeon; the death of Mr. Bransby Cooper a year or two later made him senior surgeon, and for twenty-two years he served the hospital in this capacity. He then retired from active work at the hospital and became its consulting surgeon—a position he retained till his death. Mr. Cock held the office of President at the Hunterian Society, was perpetual honorary president of the Pupils' Medical Society at Guy's, and always felt and evinced a zealous attachment and devotedness to the institution where he was educated. He was rigidly exact in his attendance to his hospital practice, and seldom if ever suffered private engagements or other interests to interfere with his public duties. He was a clear and fluent lecturer and his clinical lectures were always well attended.

As an operating surgeon Mr. Cock's experience was very extensive and, upon the whole, successful. In operations for harelip and in other cases where it is necessary with accuracy and precision to bring together and adjust two cut edges or surfaces he had a method of his own; this he accomplished by the uninterrupted suture, sewing the two edges together along their entire length with a fine needle and ligature. Mr. Cock, in his early days, was the author of several reviews, chiefly of French and German works in the British and foreign and other journals. While Demonstrator of Anatomy he published a work entitled "Dissection of the Vessels, Nerves of the Head, Neck and Chest," in which the different parts were described as they were successively brought into view under the scalpel of the dissector. The work was somewhat imperfect as only embracing a portion of the human frame, but Mr. Cock's "Head and Neck" was a model of clearness and precision and was deservedly popular. In the Royal Medical and Chirurgical Transactions several years back will be found his account of congenital malformations of the internal ear from dissections of patients who died in the Asylum for the Deaf and Dumb. From time to time he gave to the medical world short memoirs on different subjects whenever he considered that his experience entitled him to do so. These will be found dispersed in the Guy's Hospital Reports and the *Medical Gazette*. Amongst these are a series of cases of laryngotomy and tracheotomy, with remarks on the operation, and on the use of the trocar and cannula in its performance. Mr. Cock was one of the first, if not the first, to perform the operation of œsophagotomy. The Medical and Chirurgical Transactions for 1851 contains a curious and unique case of varix of the posterior tibial vein, the apparent result of a wound of the popliteal artery and vein eleven years previously, for which the femoral artery had been tied. The limb was amputated by Mr. Cock under circumstances described in the paper. During the session of the Royal Medical and Chirurgical Society for 1851–52 a paper by Mr. Cock was read and was published in the volume for 1852. It was entitled "Remarks on the surgical operations usually adopted in cases of retention of urine, together with an abstract of cases in which the bladder was punctured through the rectum, either for relieving distension or facilitating the cure of impermeable stricture." Forty cases of stricture of the bladder were enumerated, in the majority of which the operation was performed by Mr. Cock. The remainder occurred in the practice of his colleagues and came under his immediate observation. Considerably more than half of these cases occurred previously to the year 1850, and their precise dates are accurately stated in the published memoir. Mr. Cock did not, as has been stated, recommend puncturing the bladder in all cases of difficult stricture, but thought that in some few instances it might be found a better alternative for the patient than a tedious course of damaging catheterism.

The above, although but a brief outline of the career of a surgeon who formed a connecting link with the Clines, the Coopers and the Keys and the united schools in the Borough will doubtless prove of interest to our readers.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the First Professional Examination for the diploma of Fellow at a meeting of the Board of Examiners on the 14th inst.:—

Anatomy and Physiology.—**Thomas Wilson, M.R.C.S., of University College and Mason's College, Birmingham; Edward Tenison Collins, M.R.C.S., Cambridge and Edinburgh Universities and Mason's College, Birmingham; John H. Crawford, of Edinburgh University Extra-Mural School; Percy R. Cooper, of Owens College and Royal Infirmary, Manchester; John W. Haines and Evelyn G. B. Adams, of St. Bartholomew's Hospital. (Ten candidates were referred back to their professional studies for six months.)**

Passed on the 15th inst.:—

Herbert E Counsell, M.R.C.S., and Charles Pollard, M.R.C.S., of Guy's Hospital; Charles E. Baker, M.R.C.S., of Cambridge and St. Bartholomew's Hospital; George O. Rigby, of Melbourne University and University College, Liverpool; Cuthbert H. J. Lockyer, of Charing-cross Hospital; Francis C. Bottomley, of Cambridge University and St. George's Hospital (Nine candidates were referred back to their professional studies for six months.)

Passed on the 16th inst.:—

Douglas Crawford, of Berlin and Edinburgh Universities and University College; and Robert W. Michell, of Cambridge University and St. Bartholomew's Hospital. (Ten candidates were referred back to their professional studies for six months.) Of the forty-three candidates who presented themselves for this examination fourteen passed and twenty-nine were referred.

The following are the arrangements for the Final Examination for the diploma of Fellow, for which thirty-four candidates have entered their names:—Monday, 21st inst, 1.30 to 5.30 P.M., Written Examination; Tuesday, 22nd, 2.15 to about 5.30, Clinical Examination, *viva voce* and Written; Wednesday, 23rd, 1.30 to about 5, Operations; Thursday, 24th, 2 to 3.45, Surgical Anatomy; Friday, 25th, 5 to 8.30, Pathology. The examinations on Monday, Tuesday, Wednesday and Thursday will be held at the Examination Hall, Victoria Embankment. On Friday the Examination will be held at the Royal College of Surgeons. Candidates will be required to attend on each of the above dates.

FOOTBALL CASUALTIES.—The following casualties occurred on Saturday, the 12th inst. In a match at Felixstowe, between teams representing Landguard Fort, Felixstowe, and the Orwell Works, Ipswich, one of the latter team, aged twenty-four, sustained injuries to the abdomen, from which he died, in the Ipswich Hospital, on the following night. During a match between Warrington and Mossley a Warrington half-back fractured his clavicle. In the course of a match at Keighley, between Keighley and Haworth, a three-quarter-back of the former team broke two of his ribs. Whilst playing a match at Cowdenbeath, between teams representing the Cowdenbeath and Dunfermline clubs, one of the Cowdenbeath half-backs fractured his right leg.

THE JONSON MEMORIAL FUND.—At a meeting of the committee of the Jonson Memorial Fund, held at Sir James Paget's house on Nov. 3rd, the bust of the late Mr. G. C. Jonson was exhibited, and was much admired, the likeness being thought an especially good one. It was unanimously resolved: "That the bust of the late Dr. G. C. Jonson be sent to the next exhibition of the Royal Academy, in accordance with the wish of Mr. T. Brock, R.A., the sculptor, and afterwards be placed in the school-room of Epsom College." By the kind permission of Mr. Brock the bust will be on view to subscribers any day—Saturday and Sunday excepted—at his studio, 30, Osnaburgh-street, Regent's-park, before being sent to the Royal Academy.

LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY, LIMITED.—A meeting was held at Park House, Croydon, on the 14th ult. (Dr. Duncan in the chair), to establish a branch of the above Society for Croydon and the neighbouring places. Dr. Mead, of Newmarket and London, explained the constitution and objects of the Society, and answered several questions on points of detail. The meeting unanimously resolved to form a division for Croydon and the surrounding places. Dr. Duncan was elected president; and Drs. Philpot, Richardson, Rosser, Parsons-Smith and Thompson, vice-presidents. A council was formed consisting of Drs. Beard, Cooper, Drew, Ormerod, Vincent, Wayte and Webster, and Dr. Whishaw was elected honorary secretary.

ANDERSON'S COLLEGE MEDICO-CHIRURGICAL SOCIETY, GLASGOW.—The second meeting of this Society was held on Saturday, the 12th inst., in the college buildings, when Professor A. M. Buchanan, M.A., M.D., delivered his inaugural address as honorary president. The subject was, "Medical Science, its Uncertainties, and how to Overcome Them." There was a large audience, who listened to his scientific oration with great interest. In treating of his subject he urged the importance of close attention to facts and their proper association and correct generalisation, at the close of the address receiving quite an ovation from those present. The meeting terminated with a vote of thanks and cheers for the honorary president.

METROPOLITAN ASYLUMS BOARD.—The number of patients in the several fever hospitals of the Metropolitan Asylums Board at midnight on Nov. 15th was as follows:—Eastern Hospital, 391 scarlet fever, 95 diphtheria and 47 enteric fever; North-Eastern Hospital, 458 scarlet fever; North-Western Hospital, 397 scarlet fever, 79 diphtheria and 21 enteric fever; Western Hospital, 301 scarlet fever, 36 diphtheria, 1 typhus fever and 14 enteric fever; South-Western Hospital, 305 scarlet fever, 54 diphtheria and 23 enteric fever; South-Eastern Hospital, 388 scarlet fever, 14 diphtheria and 16 enteric fever; Northern Hospital, 929 scarlet fever and 14 diphtheria; Gore Farm Hospital, 812 scarlet fever. At the South-Eastern Hospital there were 3 cases and in the hospital ship *Atlas* 8 cases of small-pox.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BAILEY, S. H., M.D., M.B., C.M., L.S.A., has been appointed Medical Officer to No. 5 District of Nottingham Union, vice E. C. Buckoll, resigned.

BARTON, WM. E., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Wyeside Sanitary District of the Weobley Union.

BURTON, R. G., M.D., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Rural Sanitary District of the Brentford Union.

CHAPMAN, CHARLES W., M.R.C.P., has been appointed a Physician to the National Hospital for Diseases of the Heart and Paralysis.

COOKE, WILLIAM H., M.R.C.S., L.R.C.P., L.S.A., has been appointed Senior House Physician to St. George's Hospital.

DALBY, A. W., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Frome Rural and Urban Sanitary Districts.

DARRELL, H. W., M.D. Toronto, C.M., L.R.C.P. Lond., has been appointed Medical Officer for the Third Sanitary District of the Blofield Union.

DUMMERR, H. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fourth Sanitary District of the Bromley Union.

HEATON, GEO., M.B., B.Ch. Oxon., F.R.C.S., has been appointed Visiting Surgeon to the Children's Hospital, Birmingham, vice Hunt, resigned.

MASON, WM., L.R.C.P., L.M., L.R.C.S. Edin., has been reappointed Medical Officer of Health for the St. Austell Rural and Urban Sanitary District.

MATHIESON, GEORGE M.B., C.M. Glas., has been appointed Junior Resident Medical Officer to the County Asylum, Stafford.

MCGACHEN, F. W. D., L.F.P. & S. Glasg., L.M., L.S.A., D.P.H. Lond., has been appointed Medical Officer for the Rugby District of the Rugby Union, Medical Officer to the Union House, and Public Vaccinator to the Town of Rugby, vice Angove, resigned.

MACDONNELL, LUCIUS O. A., B.A., M.B., B.Ch. and B.A.O. Univ. Dub., has been appointed Surgeon to Aramac Hospital, Central Queensland, vice H. J. Hewer, M.B., resigned.

MCKELVIE, R., M.D., L.R.C.S. Edin., has been appointed Medical Officer for the Workhouse and the Second Sanitary District of the Blofield Union.

MILLS, JOHN, M.B., B.S. Irel., has been appointed House Surgeon to the National Eye and Ear Infirmary, Molesworth-street, Dublin, vice C. Sullivan.

MOORE, W. HODGSON, M.R.C.S., has been appointed Honorary Surgeon to the Kidderminster Infirmary and Children's Hospital.

MORTLOCK, AMBROSE W., M.B., M.S. Edin., has been appointed Medical Officer for the Second Sanitary Division of the Greystoke District of the Penrith Union.

NEWMAN, D., M.D., C.M., F.F.P.S. Glasg., has been appointed Surgeon to the Royal Infirmary, Glasgow, vice Macewen, resigned.

ROMER, LESLIE R., M.R.C.S., L.R.C.P., L.S.A., has been appointed House Physician to St. George's Hospital.

STROVER, H. C., L.S.A. Lond., L.A.H. Dub., has been appointed Medical Officer of the Sandy Sanitary District of the Biggleswade Union.

TAYLOR, DANIEL M., M.A., M.B., M.C. Glas., has been appointed Deputy Coroner for the North Riding of Yorkshire.

TOWNSLEY, J., M.B., C.M. Edin., has been appointed Medical Officer to the Ardsley Local Board.

YOUNG, CHARLES W. F., M.D. Lond., M.R.C.S., D.P.H. Camb., has been appointed Assistant Medical Officer to the London County Council.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. Board and residence, and allowance for washing provided. (Applications to the Secretary, 24, Finsbury-circus, E.C.)

DEVON AND EXETER HOSPITAL, Exeter.—Assistant House Surgeon. Salary £40 per annum, with board and lodging, not including alcoholic liquors and aerated waters.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer for one year. Salary £80 per annum, with board and lodging.

GENERAL HOSPITAL, Nottingham.—Assistant House Surgeon for six months. Board, lodging and washing provided in the hospital.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House Surgeon. Salary £70 per annum, with residence and maintenance in the house.

NOBLE'S ISLE OF MAN AND GENERAL HOSPITAL AND DISPENSARY, Douglas, Isle of Man.—Resident House Surgeon; unmarried. Salary £100 per year, with apartments, gas, coal and laundry free.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, N.E.—Junior House Surgeon for six months. Salary at the rate of £60 per annum.

NORTHERN INFIRMARY, Inverness.—House Surgeon and Dispenser. Salary £70, with board &c.

PARISH OF BIRMINGHAM WORKHOUSE INFIRMARY.—Resident Assistant Surgical Officer for the Workhouse Infirmary. Salary £100 per annum, with furnished apartments, rations (which do not include alcoholic liquors), coals, gas, washing and attendance.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone road, N.W.—Resident Medical Officer for four months. Salary at the rate of £60 per annum, with board and residence.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant for six months. Board and lodging provided.

THE GLASGOW POLICE COMMISSIONERS.—Physician Superintendent of their hospital, Belvidere. Salary £400 per annum, with house, accommodation, board and attendance. (Applications to the Clerk to the Commissioners, City Chambers, Glasgow.)

THE NEW LONDON COUNTY ASYLUM, Claybury, Woodford, Essex.—Medical Superintendent. Salary £1000 per annum, with house, coals, lighting, milk and vegetables. (Applications to Mr. Partridge, London Asylums Committee Office, 21, Whitehall-place, London, S.W.)

THE LONDON THROAT HOSPITAL, 204, Great Portland-street, and 72, Bolsover-street, W.—Pathologist.

VICTORIA HOSPITAL, Burnley.—Honorary Ophthalmic and Aural Surgeon.

WESTERN GENERAL DISPENSARY, Marylebone-road, N.W.—Junior House Surgeon. Salary £50 per annum, with board and apartments.

WEST LONDON HOSPITAL, Hammersmith-road, W.—House Physician for six months. Board and lodging provided.

WEST LONDON HOSPITAL, Hammersmith-road, W.—House Surgeon for six months. Board and lodging provided.

WESTMINSTER GENERAL DISPENSARY, 9, Gerrard-street, Soho.—Resident Medical Officer for one year.

WOLVERHAMPTON EYE INFIRMARY.—House Surgeon. Terms £60 per annum, with rooms, board and washing.

Births, Marriages and Deaths.

BIRTHS.

FOULERTON.—On Nov. 12th, at Brompton-road, S.W., the wife of Alex. G. R. Foulerton, M.R.C.S., D.P.H. Camb., of a daughter.

HARRIES.—On Oct. 30th, at Grosvenor House, Aberystwith, the wife of T. D. Harries, M.R.C.P. Lond., F.R.C.S., of a son.

HARRIS.—On Nov. 15th, at Tregortha, Twickenham, the wife of Percy Traer Harris, M.R.C.S., L.D.S. Eng., L.S.A. Lond., of Harley-street, W., of a son.

HARRISON.—On Nov. 14th, at Beverley-road, Hull, the wife of Edward Harrison, M.A., M.B. Cantab., F.R.C.S., of a daughter.

MARRIAGES.

RICE—HANNAY.—On Nov. 15th, at All Saints' Church, Leamington Spa, by the Rev. C. H. Rice, B.D. (Rector of Chean and Rural Dean), assisted by the Rev. W. C. Furneaux, M.A. (Vicar of Leamington), and the Rev. A. Nicholson, LL.D., Bernard Rice, M.D. Lond., of 5, Clarence-terrace, Leamington, son of the late Bernard Rice, M.B. Lond., of Stratford-on-Avon, to Lilian Hyde (Zelly), third daughter of W. Hannay, Esq., of Leamington Spa.

ROBERTS—WEARE.—On Nov. 15th, at St. Mary's, West Kensington, Dr. Roberts, of Close-gate, Salisbury, to Fanny, widow of Arthur Weare, of Belvidere-villa, Upper Norwood.

DEATHS.

BROADWAY.—On Nov. 3rd, at 61, Kennington-park-road, Sigismund Alexander Wm. Edward Broadway, M.R.C.S. Eng., L.R.C.P. Lond., only son of the late James Broadway, of Cairo, Egypt, aged 28.

CRESSWELL.—On Nov. 9th, at Grove Lodge, Winchmore-hill, N., John Cresswell, M.R.C.S., L.S.A. Lond., aged 74.

MORRIS.—On Nov. 13th, at Eaton-place, Brighton, John Morris, M.R.C.S., aged 44.

WILTSHIRE.—On Nov. 2nd, at Winkleigh, Tunbridge Wells, Thomas Wiltshire, Surgeon, aged fifty-six.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages and Deaths.

Medical Diary for the ensuing Week.

Monday, November 21.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays, at the same hour.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; and on Tuesday, Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M.; and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2 P.M.; Thursday, 2.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.; and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.

LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital: 1 P.M., Mr. W. Lang: Diseases of Iris.—101, Gt. Russell-st.: 8 P.M., Dr. Galloway: Nervous System.—Parkes Museum (Margaret-st., W.): 4 P.M., Dr. Louis. C. Parkes: Communicable Diseases.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road).—5 P.M. Mr. Lennox Browne: Rhinitis, Acute, Purulent, Croupous, Hypertrophic, Hyperæsthetic (Hay Fever and Hay Asthma), Atrophic; Deformities and Deviations of the Nasal Septum.

THROAT HOSPITAL (Golden-sq.).—5 P.M. Mr. F. G. Harvey: Internal Ear Deafness.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. W. B. Hadden: Syphilis and Nervous Disease in Children.

Tuesday, November 22.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same day, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars: 4 P.M., Dr. Payne: Pityriasis Rubra and General Dermatitis.—Bethlem Hospital: 2 P.M., Dr. Percy Smith: Insanity with Syphilis.—101, Gt. Russell-st.: 8 P.M., Dr. Dakin: Preservation of Perineum.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Mr. J. W. Hulke: A case of Hepatic Abscess which burst into the Peritoneal Sac treated by Incision and Flushing; recovery.—Mr. Edmund Owen: The Radical Treatment of Severe Talipes Equino-varus in Children.

HARVEIAN SOCIETY.—7.30 P.M. Dinner at the Café Royal.

Wednesday, November 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday and Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. C. Y. Biss: Pulmonary Emphysema.—Royal London Ophthalmic Hospital: 8 P.M., Mr. A. S. Morton: Ocular Paralyses.—

THROAT HOSPITAL (Golden-sq.).—5 P.M. Mr. T. Mark Hovell: Middle Ear Disease.

HUNTERIAN SOCIETY (London Institution).—8.30 P.M. Dr. S. Mackenzie: Urticaria.—Dr. G. Newton Pitt: The Value of Venesection in the Treatment of Thoracic Aneurysm.

Thursday, November 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-street: 4 P.M., Dr. Colman: Pathological Demonstration on Tuberculosis.—National Hospital for the Paralysed and Epileptic: 2 P.M., Mr. Victor Horsley: Surgical Treatment of Nervous Diseases. London Throat Hospital, Great Portland-st.: 8 P.M., Mr. W. R. H. Stewart: The Causation of Diseases of the Ear.—Central London Sick Asylum, Cleveland-st., W.: 5.30 P.M., Mr. John Hopkins: Cases in the Wards.

CENTRAL LONDON THROAT AND EAR HOSPITAL (Gray's Inn-road).—Dr. Dundas Grant: The Examination of the Organs of Hearing.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-sq.).—8.30 P.M. Specimens by Mr. H. Reeves. Dr. Inglis Parsons: Total Absorption of a large Fibromyoma of the Uterus by Apostoli's Treatment.—Dr. F. C. Batchelor: Cystic Formations of the Broad Ligament, Diagnosis and Treatment.

Friday, November 25.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. C. Y. Biss: Hæmoptysis.—Bacteriological Laboratory, King's College: 11 A.M. to 1 P.M., Professor Crookshank: Erysipelas and Suppuration (Streptococci).

CLINICAL SOCIETY OF LONDON.—Living Specimens at 8 P.M.:—Dr. Hadden: Two cases of Rhythmical Rocking Movements in Children.—Mr. Storer-Bennett: A case of extensive Fracture of the Upper Jaw.—Dr. F. R. Walters: A case of Pernicious Anæmia.—Dr. Pitt and Mr. Lane: A case of Cranial Cyst. Papers at 9 P.M.:—Mr. Hulke: A case of Pancreatic Cyst; exploratory laparotomy; enucleation impracticable; death from shock.—Dr. Roper and Mr. W. A. Lane: A case of Excision of a Cancerous Stricture of the Small Intestine from a case of Complete Obstruction of seventeen days' duration.—Dr. James Calvert: A case of Subacute Œdema of Lung occurring above a Diminishing Pleural Effusion.

Saturday, November 26.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 11 A.M., Dr. Theo. Hyslop: Insanity, with Organic Brain Disease.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Nov. 17th, 1892.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo	Maximum Temp. Shade.	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
Nov. 11	30·15	S.W.	46	45	..	52	43	..	Foggy
,, 12	30·02	S.W.	49	48	..	54	46	·05	Raining
,, 13	29·90	S.E.	54	53	81	57	48	·04	Bright
,, 14	29·83	S.W.	53	52	84	61	51	·03	Cloudy
,, 15	29·71	S.W.	56	55	..	57	53	·02	Raining
,, 16	29·75	N.E.	55	54	..	56	52	·70	Raining
,, 17	30·02	N.E.	48	46	55	48	45	·79	Cloudy

Notes, Short Comments & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

AN UNUSUAL CASE.

A CORRESPONDENT writes:—"Can any of your readers throw any light upon the following case:—A young lady, aged twenty-three years, up to and about last Christmas was a pale, anæmic-looking girl, breathless upon the least exertion. A series of headaches led to an examination of urine, when it was found that it contained albumen (2 per 1000 Esbach) casts and fat cells. Iron was administered (four grains three times a day), and great improvement in health and appearance ensued. Colour has come to the cheeks and activity and energy have succeeded listlessness and breathlessness. But the amount of albumen has doubled in the time; in fact, it would seem that things improve in direct ratio to the increase of albumen. The heart is only slightly hypertrophied. Diet (milk, fish, starch &c.) is only sparing, yet weight increases."

Dr. John Housley.—We doubt very much whether any such book exists. The means adopted to procure a water-supply for a given village depend but little on the amount of population compared with the topographical, geological and other like conditions involved. Each case, as a rule, must be decided on its own merits, and these are best estimated by an expert water engineer.

Mr. A. T. Brand.—The book has not yet been brought under our notice

A RECKLESS MEDICAL COMPETITION.

THE *Reporter* of Ashton-under-Lyne of Nov. 12th contains the following paragraph (the names which are given we have deleted):—

> "The spirit of keen competition seems to have at last permeated the medical profession in Dukinfield. A week or two ago Dr. —— and Dr. —— opened dispensaries in different parts of the town at a charge of one penny a week per member. Now we hear that Dr. —— and Dr. —— have entered into competition, and commenced dispensaries (in one case next to an establishment run by Drs. —— and ——) at the small fee of a halfpenny per week membership."

We say little on such a state of matters until we have given the parties concerned an opportunity of explaining their participation in a system which seems disastrous.

Sceptic must have been aware that there are people so deluded as to believe anything that is improbable and absurd. We know nothing of "electropoise."

M.R.C.S. Eng. is thanked for his communication. He will understand that though we do not publish it, we appreciate it.

A FORM OF DANDRIFF.

To the Editors of THE LANCET.

SIRS,—I have a middle-aged lady under treatment who is suffering from a most troublesome form of dandriff, accompanied by considerable loss of hair, which has existed for years, and as she states she caught it from her husband through wearing his garden hat occasionally, it is probably parasitic. Would any of your readers kindly suggest a form of treatment? Bichloride of mercury has been used as an application both in the form of solution and of pomade (four grains to the ounce).

I am, Sirs, yours faithfully,

Nov. 14th, 1892. LUX.

P.S.—The husband has derived much benefit from the application of pomade made with lanoline and bichloride of mercury of the strength named, but not until he had lost a great deal of his hair, and even now he cannot get rid of the dandriff.

FRIENDLY SOCIETIES ABUSED BY THE WELL-TO-DO.

A CORRESPONDENT asks what can be done to prevent tradespeople and others in receipt of good incomes becoming members of provident medical associations "simply for the sake of being medically attended for 5*s. per annum*." He is surgeon to a "lodge," and has on his list a solicitor's managing clerk (an admitted solicitor), the principal draper, ironmonger, stonemason, a master carpenter, an artist, proprietor of hotel, ditto of several inns, who can all well afford to pay. He says if he declined to attend them the lodge could easily get a fresh surgeon from amongst his neighbours, and he would also lose attendance on their families. He justly observes that what is wanted in the profession is "coöperation."

General Practitioner.—We shall not forget the grievance indicated by our correspondent; but one thing at a time is often the best policy.

Mr. L. Miller.—We do not think our correspondent could do better than refer to the leading article in THE LANCET of Nov. 5th.

MEDICAL AID ASSOCIATIONS.

Investigator, though objecting to all "sweating," agrees rather with "Verax" than with Dr. Phillips. He thinks the truest words spoken are those by "Fairplay." "It is very much the fault of medical practitioners generally that Medical Aid Associations are able to go on, for if they would keep only qualified assistants and pay and treat them well, the Associations would find difficulty in securing officers or members." He advises a conference of the medical and other officers, and thinks that in this way better terms would be secured. The demand on our space prevents the insertion of this and many other letters.

Surgeon-Major.—We are not aware of any Army Medical Report having been recently published. That for 1890 was reviewed in THE LANCET of July 30th, Aug. 6th and Aug. 13th, 1892.

Mr. Vernon Mossman (Manchester).—We shall be obliged if our correspondent (whose card has been mislaid) will forward us his address.

SYMPHYSEOTOMY.

AT a recent meeting of the Philadelphia County Medical Society Dr. Barton C. Hirst reported a case of symphyseotomy performed on a young woman in the University Maternity Hospital. The operation was successful as regards the mother, and a live infant was readily delivered. It is believed (says the New York *Medical Record*) that this is the first instance in which this operation, as a substitute for the Cæsarean section, has been attempted in the United States.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—

A.—Mr. Innis Addison, Glasgow; Mrs. A. Amphlett, London; A. B., London; A. M. S., Malta.

B.—Dr. E. Blake, London; Dr. D. Black, Glasgow; Mr. William Berry, Wigan; Dr. A. T. Brand, Yorks; Mr. C. Van Biema, Manchester; Mr. Breeze, London; Mr. J. A. Bright, Glastonbury; Mr. Browne, Douglas; Mr. T. B. Browne, London; Mr. Bourchier, Brighton; Messrs. Browning and Co., London; Mr. Bowe, Highbury; Dr. Bentley, Whitehouse.

C.—Dr. Collier, Oxford; Dr. J. M. Clarke, Clifton; Dr. J. Cagney, London; Messrs. Calvert and Co., Manchester; Dr. Coghlan, Aldershot; Mr. J. G. Constantine, London; Messrs. Cock, Russell and Co., London; Mr. Chapman, Belfast; Messrs. Christy and Co., London; Mr. Clark, West Brighton; Staff-Surgeon Gipps, China; Dr. Criaise, Paris; Mr. Clark, Wolverhampton; Madame Caplin, London; Mr. Connell, co. Tipperary; Colony.

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F.—Prof. T. R. Fraser, Edinburgh; Messrs. Fannin and Co., Dublin; Mr. Fox, Manchester; Fidelis, London; F.R.C.S.I.

G.—Dr. R. J. Godlee, London; Dr. H. W. Gairdner, Shrewsbury; Mr. J. H. Goodwin, London; Messrs. Griffin and Co, London.

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N.—Nemo, London.

O.—Mr. Edmund Owen, London.

P.—Mr. J. Purves, Yorks; Mr. Page, London; Mr. Pentland, Edinburgh; Messrs. Potter and Clarke, London; Pauline, London

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T.—Dr. W. Bezley Thorne, London; Dr. Tibbits, London.

U.—Dr. Unna, Hamburg.

V.—Victoria Hospital, Burnley.

W.—Dr. S. W. Wheaton, London; Dr. Wacchter, Wildbad; Dr. R. Williams, Preston, Mr. Williams, Brockley; Messrs. White, Druce and Co., London; Mr. Wooldridge, Stourbridge.

X.—X. Y., London; X.

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C.—C. Collingwood, Burton-on-Trent; Clavicle, London; Class Rooms, Edinburgh; College of Preceptors, Bloomsbury; Chief Surgeon, Tredegar.

D.—Mr. Dawson, Halifax; Mr. Davis, London; Mr. Davies, Cwm Carn; Mr. Davids, London; Deltoid, London; Debility, London; Dundee Convalescent Home; Dr., Caldicot.

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N.—Mr. Niven, Littleborough.

O.—Mr. Offord, London.

P.—Dr. Phillips, Birmingham; Mr. Price, Longton; Portlock, Highbury; Pax, London.

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T.—Mr. Thin, London; Mr. Tyte, Minchinhampton; Mr. Trumper, Harrogate; Mr. Toy, Chipping Norton; Mr. Thomas, Bournemouth; Mr. Taylor, Ruthin.

V.—Viator, London.

W.—Mr. Wilcox, Yarmouth; Mrs. Willis, Torquay; Messrs. Wilson and Blessley, London; Mr. Walsh, co. Tipperary; Messrs. Whitehead Bros., London; Messrs. Whitworth and Stuart, Manchester; Messrs. Wright, Sidcup; Mr. Williamson, Liverpool; Mr. Walsh, Clogheen; Dr. Whitehill, Bury; Mrs. Wyrill, Bradford.

X.—X. Y. Z., London.

Z.—Z., Upper Norwood.

NEWSPAPERS.—*Oswestry Advertiser, Sala's Journal, Liverpool Journal of Commerce, Leeds Mercury, Yorkshire Post, Magazine Journal, Bristol Mercury, City Press, Liverpool Daily Post, Glasgow Herald, Waterford Chronicle, Melbourne Age, Scottish Leader, Eastern Morning News, Bradford Observer, Times of India, Le Temps (Paris), Madras Weekly Mail, Scotsman, Birmingham Post, Pioneer Mail, Newcastle Journal, Sussex News, Mining Journal, Weekly Free Press and Aberdeen Herald, Reading Mercury, Law Journal, West Middlesex Standard, Local Government Chronicle, Windsor and Eton Gazette, Hertfordshire Mercury, Dumfries and Galloway Standard, Surrey Advertiser, Fulham Chronicle, Builder, Windsor and Eton Express, Sunday Times, Louth Times, Oldham Standard, Architect, The News, Sanitary Record, Le Courrier de la Presse (Paris), Bath Gazette, Insurance Record, Local Government Journal, The Referee, Western Chronicle, West Middlesex Advertiser, Temperance Chronicle, Court Circular, Bacup Times, Clifton Chronicle, Rugby Advertiser, Catholic Times, Citizen, Oxfordshire News, West London Observer, &c.*, have been received.

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